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World Vision, Inc

**World Vision/South Africa
FINAL EVALUATION REPORT
Bergville District Child Survival Project
Kwazulu/Natal Province
December 31, 1999**

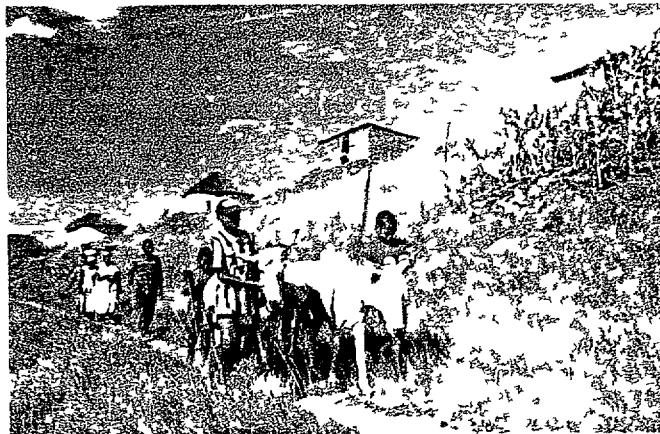
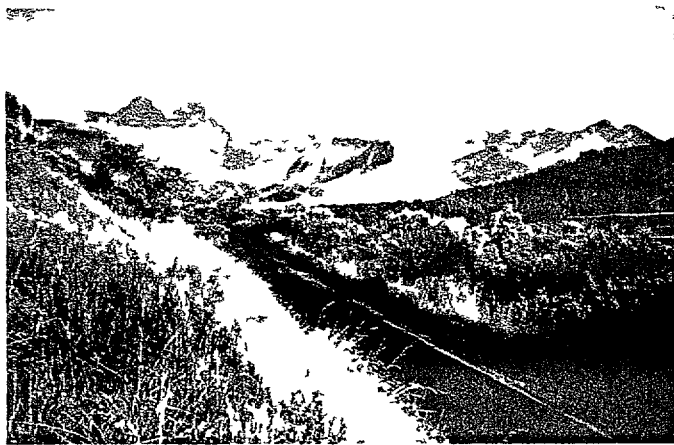
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**Child Survival Grants Program
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Report of the Final Evaluation Bergville District Child Survival Project South Africa

3-8 October 1999

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Abbreviations

ANC	Antenatal Clinic
ARI	Acute Respiratory Infection
BDDF	Bergville District Development Forum
BDHF	Bergville District Health Forum
BDCSP	Bergville district child survival project
CDD	Control of Diarrheal Diseases
CHCs	Community Health Committees
CHFs	Community Health Facilitators
CHWs	Community Health Workers
CSP	Child Survival Project
CTR	Clinic Tick Register
DIO	District Information Officer
DHIS	District Health Information System
DMT	District Management Team
DOH	Department of Health
DOTS	Directly Observed Therapy (Short)
EPI	Expanded Program on Immunization
ESATI	Eastern Seaboard Association of Tertiary Institutions
GMP	Growth Monitoring Program
HACs	HIC/AIDS Communicators
HIS	Health Information System
IMCI	Integrated Management of Childhood Illness
ISDS	Initiative for Sub-District Support
KPC	Knowledge Practice and Coverage Survey
JHU	Johns Hopkins University (School of Public Health)
KZN	KwaZulu-Natal
MCH	Maternal Child Health
PPASA	Planned Parenthood Association of South Africa
PEP	Perinatal Education Programs
PHC	Primary Health Care
PIIP	Perinatal Problem Investigation Program
PLA	Participatory Learning and Action
SKB	Smith Kline Beecham
SSS	Sugar, salt solution
TALC	Teaching Aids at Low Cost
TH	Traditional Healer
TOP	Termination of Pregnancy
WVSA	World Vision South Africa

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Bergville District Child Survival Project
3-8 October 1999
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The evaluation teams start work on day 1

Summary of the Evaluation

The Bergville District Child Survival Project (BDCSP) began in 1995 to reduce maternal, infant, and child morbidity and mortality among neglected populations in the Bergville area of KwaZulu-Natal, and to build the management capacity of the District Health Services (DHS). Its objectives focused on improvements in nutrition (growth monitoring and breast feeding), HIV/AIDS (awareness among school children and adolescents), control of diarrheal diseases (continued feeding, ORT, home-available fluids, and case management), immunization (increased coverage and reduced drop-outs, and disease surveillance), Acute Respiratory Infection (caretakers' health-seeking behavior for childhood respiratory infection), maternal health and family planning (improved antenatal services, mothers' awareness of danger signs, and strengthening of referral services). The project's approach to achieving its objectives was through strengthening the nascent DHS developing in KwaZulu-Natal, and to develop community-based health partnerships.

The mid-term evaluation found a highly successful community-based program in development, with major contributions to the development of the DHS just starting to emerge. The technical impact on health facilities was less dramatic, probably because of the established and sometimes entrenched nature of clinic and hospital services.

At the final evaluation further substantial changes had occurred. The Community Health Workers (CHWs) have been widely recognized both locally and nationally for their contribution to the communities, and are now becoming an important part of the formal health system. This had yet to happen at mid-term. So successful have they been, that there is rising pressure for them to provide additional services to the community, with the risk of diluting their effectiveness. There is considerable scope for further strengthening of the community partnerships.

Perhaps the most remarkable achievement has been the project's contribution to the development of the DHS, which has now evolved to the point where it is having a major impact on the management of health services in the Bergville area, with further development in process. Bergville was recently named South Africa's best rural health service. The CSP played a major role in the development of the DHS through introducing the concepts of objectives, indicators, surveys, data collection and use, and the principles of quality assurance. In most aspects the project and the DHS are so closely integrated that many interviewees had difficulty differentiating them. Further evidence of the sustainable project impact has been the selection of Bergville for an Area Development Program (ADP) by World Vision. This will be a long-term project which will include other sectors such as agriculture and microcredit. Lagging behind have been several technical issues in the health facilities and the supervision system, which need major attention.

The project's impact on HIV/AIDS awareness, through training teachers and peer-educators has been substantial, as measured through a detailed qualitative study recently carried out by Colin McKay. Evidence of behavior change is harder to find, and additional or alternative methods are recommended for the follow-on HIV project. The qualitative survey methods used will make it possible to monitor project impact.

Several technical interventions have been incorporated into an Integrated Management of Childhood Illness (IMCI) package. The EPI objectives were all met, and most of the ARI and nutritional objectives. The diarrhea objectives were mostly not met, and it is not exactly clear why. Although IMCI is now adopted, the pace for training has been generally slow and should be accelerated.

The evaluation team felt the maternal health objectives, too, have been too limited to have much impact on maternal health in the project area, although positive change was noted in a number of indicators. To achieve major impact, improved access to maternity services is needed, as well as strengthening the capacity of trained staff to reduce perinatal deaths.

Project background

The Bergville District Child Survival Project (BDCSP) began in October 1995, building on previous World Vision nutritional rehabilitation work based at the Zamimpilo Center. Its aim was to reduce maternal, infant, and child morbidity and mortality by improving the technical and management capacity of the KwaZulu Natal Department of Health (DOH) and the Bergville District Health Forum (BDHF) to deliver effective child survival interventions, and to effect genuine community involvement in health care delivery. Although the original focus was on children under age 5, this was soon re-focused on children under age 2.

Bergville is located in a rural section of KwaZulu-Natal, 260km from Durban and 370 km from Johannesburg. A population of 130,000 live in 40 communities on 263,700 ha of land. The vast majority are poor and underserved, living on tribal lands (80%), freehold land (10%) and commercial farms (10%). Because of the lack of employment, many able-bodied persons have migrated to urban areas, causing the population to be largely female and young or elderly. Lack of tertiary education has also encouraged migration. Mean income levels are judged to be below subsistence levels for South Africa. Infant mortality rates have been estimated at 55/1,000, and under-5 childhood mortality 67/1,000. A high perinatal mortality rate has been blamed on a high prevalence of congenital syphilis.

The activities of the project concentrated on

- Nutrition: growth monitoring and breast feeding
- HIV/AIDS: awareness among school children and adolescents
- Control of diarrheal diseases: continued feeding, Oral Rehydration Therapy (ORT), home-available fluids, and case management
- Immunization: increasing coverage and reducing drop-outs, and surveillance
- Acute Respiratory Infection (ARI): caretaker's health-seeking behavior for childhood respiratory infection
- Maternal/Child Health and Family Planning: improved antenatal services, mothers' awareness of danger signs, and strengthening of referral services

The strategies employed to reach the objectives set out for these activities were

- Updating the technical skills of the Department of Health (DOH) personnel to deliver child health interventions
- Improvement in the management skill of the DOH to plan, deliver, monitor, and evaluate their child survival activities
- Assist the underserved and previously unreached communities through Participatory Learning and Action (PLA) to nominate and organize health promoters who will encourage the utilization of child survival messages and services at the household and community levels
- Facilitate the integration of community resources with the DOH infrastructure and programs to establish sustainable and cost-effective delivery of child survival interventions
- Enhance the capacity of World Vision (WVSA) to improve child survival-related program activities as part of its development activities

From the beginning a series of principles were set out by the project through which they would endeavor to carry out their work in Bergville with the DOH and the community. Among these principles were

- Work for and in line with the establishment of a District Health System (DHS) within the larger development network of the area
- Effect genuine community involvement using a community development approach
- Incorporate learning into the whole process of project implementation, reflection, feedback, quality control, audit and research will be used to facilitate personal growth, self-directed learning, and skills acquisition
- Focus at the household and community level to effect health promotion, behavior change, including preventive treatment and appropriate referral, beginning with the underserved
- Incorporate sustainability in all project components
- Gather data and information, and process and use it in such a way that the community and the DOH can respond to health issues and problems
- Promote a team management approach in implementing all aspects of the program

Following on these objectives and principles, the CSP set out to strengthen health through establishing strong community partnership centering around Community Health Workers (CHWs), and Community Health Committees (CHCs). Close links were developed with the Bergville District Health Forum (BDHF), which has become an increasingly important partner to the project. The success of the project's community focus is one of the reasons why CHWs are being included in the formal health sector for the province. Strengthening of health facilities and the technical capacity of their staff, and building stronger linkages between the community and the health facilities took longer to effect, though there have been major advances since the mid-term evaluation. The project has focused on HIV/AIDS prevention through an awareness program for primary and secondary school students and teachers.

The project began at a time when the restructuring of health services was just beginning to address the fragmented and inconsistent lines of authority and responsibility for health services in South Africa. At that time it was not clear whether Bergville would be in a district or sub-district, and how the local DHS would be configured. The CSP introduced the ideas of measurable objectives, indicators, setting priorities, monitoring activities, and collecting and using data, into a system where none of these had been in common usage. Training of key staff in Quality Assurance management methods helped develop management structures and build monitoring and problem-solving methods. The close collaboration of the CSP with the DHS, with a DOH medical officer serving as project director, meant that these Child Survival methods strongly influenced the development of health services in Bergville. As events developed, this influence has affected the development of services well beyond Bergville. The influence of the BDCSP and its strategies and methods was a major reason for the recent first-place award to Bergville for its leadership in implementing district health services in South Africa. A simplified organogram for district health activities, into which the BDCSP has been integrated, is found in the project management section.

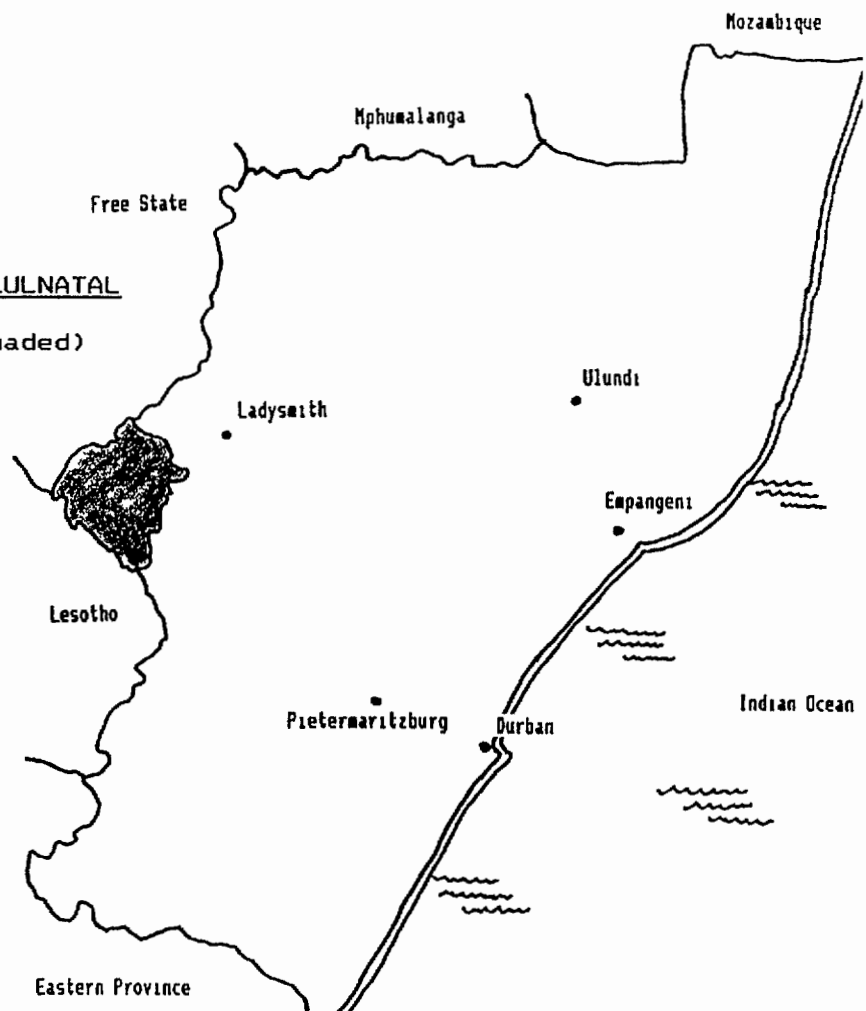
MAP of the REPUBLIC OF SOUTH AFRICA

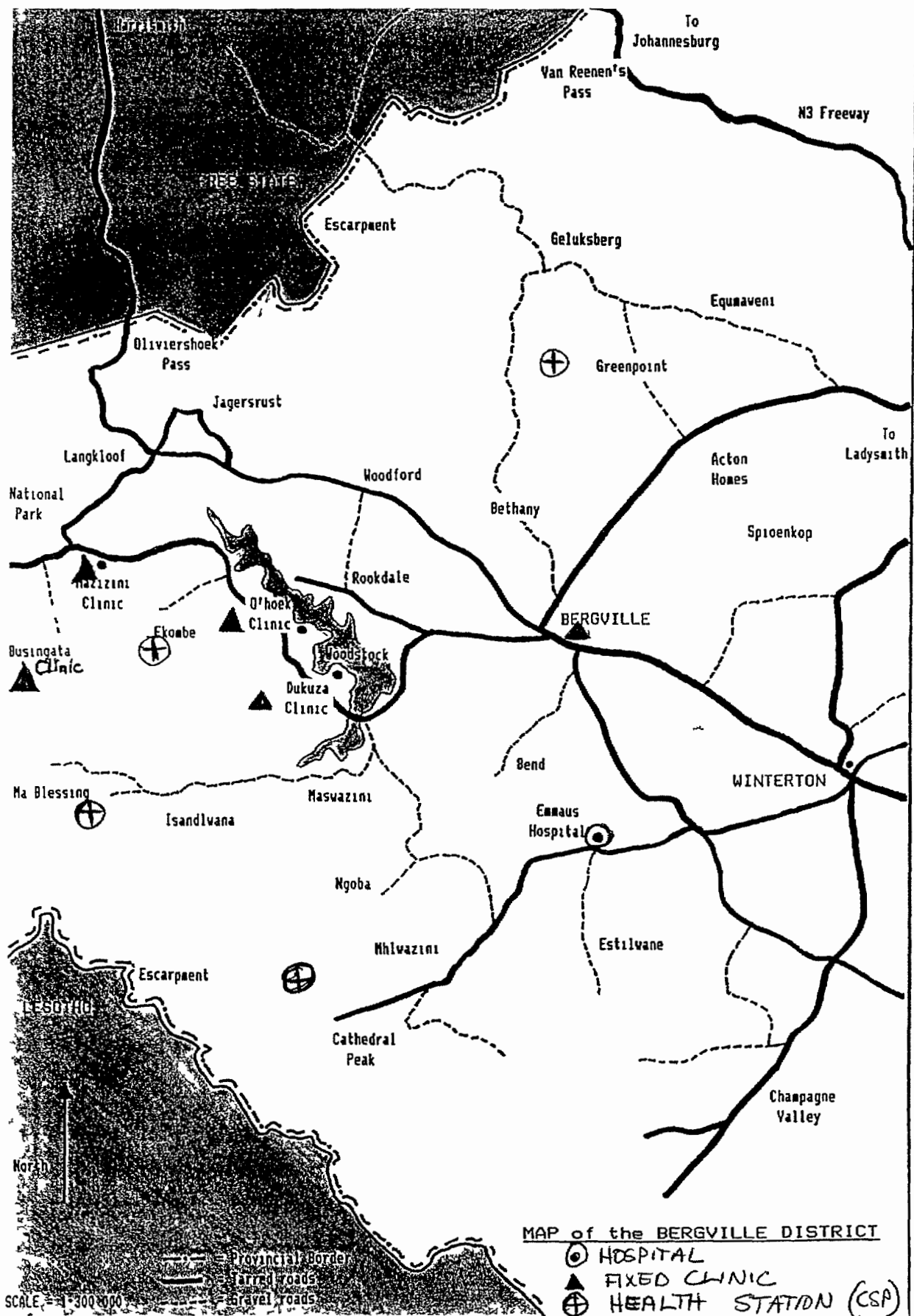
(KwaZuluNatal shaded and Bergville crossed)



MAP of KWAZULULNATAL

(Bergville shaded)





Midterm evaluation

The mid-term evaluation was carried out from 27 August to 5 September 1997. This evaluation noted major strengths in the community participation, for which PLA was a major vehicle. There was concern about the formal health structures, and the barriers which remained between the clinics and the community and the CHWs. The mid-term evaluation team was impressed at the impact of the CSP in influencing development of the evolving DHS, both in Bergville as well as other areas within South Africa. The integration of traditionally separate authorities and services within Bergville was off to a very good start. The use of Quality Assurance methods to address standard management problems had laid a strong organizational management structure. The project emphasized collection and use of data. The collection and use of data from the Knowledge Practice and Coverage survey (KPC) as well as the PLA survey was an important beginning for the District Health Information System (DHIS). At the mid-term it was noted that the foundations for an integrated project and DHIS had been laid.

The response which the project has made during 1998 to the key recommendations made at the mid-term evaluation are listed below.

1 *Use of PLA methods for health facility staff and for staff of other organizations*

Subsequently the project ran PLA training courses for personnel from the DOH, and for mobile staff team. This intersectoral training helped bring health facility staff and community personnel together to deal with common community perceptions, particularly about health services being provided.

2 *An integrated curriculum and job descriptions are needed for CHWs skills are needed by the Community Health Facilitators (CHFs) in CHW supervision and helping to build the Community Health Committees (CHCs) and an integration is needed between the health facility staff and the CHWs*

Shortly after the mid-term evaluation the curriculum and job descriptions were drawn up, and clear supervision channels established. Training was provided for CHFs using local staff and materials developed for this purpose in Tanzania, both in supervision and in strengthening the roles and management of the CHCs. Following the mid-term recommendations CHWs began working with mobile health teams at outreach sites and also at fixed facility sites.

3 *Although the foundations for the information system were in place, efforts were needed to get this into regular use and for users to understand how information can influence decisions*

Following the evaluation, the introduction of the information system was begun. The register has now been put into wide use. There is the perception that information collected is now being used for decisionmaking. Since the mid-term recommendations the information system has developed greatly, and details are set out in the information section of the final evaluation.

4 *There was a lack of integration of nutrition messages resulting in some inconsistencies*

Inconsistencies were satisfactorily dealt with, and supervision instruments developed by BASICS were used to help health workers provide uniform messages.

- 5 *Problems were noted in child health technical interventions in the run-up to introduction of IMCI Weakness was also noted in the maternal health activities, particularly around perinatal services*

The Integrated Management of Childhood Illness (IMCI) approach was introduced shortly after the mid-term evaluation. This began with adaptation and the development of messages and materials. As will be seen from the final IMCI evaluation, although progress has been made there are still problems with the extent of IMCI training, and community understanding around some key IMCI messages, particularly with diarrhea. Workshops on various maternal health topics were held by Emmaus hospital.

- 6 *Private practitioners and traditional healers could be involved in HIV/AIDS activities*
A workshop for traditional healers was held, but this was not very successful for reasons not fully understood. Networking with private medical practitioners has not been done.

- 7 *A continuing resistance seems to be present among health facility staff concerning provision of immunization on all days*

Focus groups among community members indicated that health worker attitude may contribute to high drop-out rates. The issues in this area have proved hard to address in the year following the mid-term evaluation.

- 8 *Administrative arrangements with World Vision South Africa should be streamlined*
Recommendations were made by the project manager for improvements in administrative procedures. This was further amplified by an external auditor. Improvements have been slow, although by the project end reorganization of WVSA should improve arrangements for future activities.

Final evaluation process

The final project evaluation was carried out from 3-8 October 1999. The evaluation used 6 teams, each with between 6 and 12 team members. Evaluation team members came from Bergville, elsewhere in KwaZulu-Natal, the Eastern Cape Province and elsewhere in South Africa, Kenya, and the USA. These persons represented the CSP, local health services, World Vision, and a variety of international organizations. The survey was coordinated by Gilbert Burnham from the international health faculty of the Johns Hopkins School of Public Health. In all, some 43 persons were part of the evaluation teams. Each team assessed a specific program activity or project function. Some teams cut across a variety of activities. Areas assessed by the teams included:

- 1 Project/district as a whole (including 3 sub-teams)
 - district development based on primary health care (PHC)
 - sustainability
 - community partnership
 - district health information system (DHIS)
- 2 HIV/AIDS
- 3 IMCI (starting in the beginning as some but not all IMCI components)

4 Maternal health

Teams planned the assessment of their areas and carried out extensive field and headquarters interviews over 3 days. Findings were then written up and recommendations made for the areas each team was evaluating. Technical feedback from the evaluation findings was provided to a group of managers and policy-makers from Bergville, KwaZulu Natal, and Pretoria on 6



Teams start the project evaluation team discussions

October. A report of the evaluation and project achievements in more general terms was given to the community during the morning of 7 October in Farmers' Hall. The findings by the various teams, with their recommendations, are found in the body of

this evaluation. A list

of the team members and persons interviewed are in the Annex

Knowledge, Practice and Coverage (KPC) survey

As part of the preparation for writing the Detailed Implementation Plan (DIP), a baseline KPC survey was carried out. This focused on immunization coverage and current knowledge and practices of mothers and caretakers about child health, which information was needed to design the strategy and methods the project would use to achieve its objectives. Participants were mothers and caretakers of children under the age of 2 years. A standard 30-cluster survey method was used, with 10 households in each cluster. This survey was repeated prior to the final evaluation to measure any changes.

Although this information is helpful in planning and assessing the outcomes of health projects, the limitations of these methods should be remembered. The cluster method can accurately measure large changes in fairly common events. Things that are less common, or where changes are less than perhaps 20-30%, may not be accurately measured. The statistical validity of responses for only a small number of responders should be doubted unless changes are of a very large magnitude. To have an accurate picture of less frequent events would require a sample size much larger than the 300 used in standard KPC surveys. Doing this requires more resources than most projects have.

The following are the project objectives and the KPC results

Project objective EPI	baseline KPC results (%)	midterm Sept 97 adjustment	August 98 results (%)	National DOH 2000 targets (%)
EPI 1 Increase to 90% the number of children (12-23 mos) who received DPT-1	75	-	97	
EPI 2 Increase to 80% the number of children (12-23 mos) who receive OPV-3	57	-	96	90
EPI3 Increase to 90% the number of children (12-23 mos) who receive measles vaccine	71	-	93	90
EPI 4 Reduce by 20% the number of children (12-23 mos) who defaulted between DPT-1 and DPT-3	25	4%	1 9	-
EPI 4 Reduce the number of children (12-23 mos) who default between OPV1 and OPV3	25 5	4%	2 9	-
EPI 5 Establish 10 sentinel surveillance sites which will track vaccine-preventable diseases	10 sites	10 sites	Strategy dropped as new surveillance system adapted for district	-
NUT 1 Increase to 65% the number of children (0-3 mos) who are exclusively breastfed	36 9	-	48	-
NUT 2 increase to 75% children (0-23 mos) who will be breast fed and given solid/semisolid foods	65	-	19 (number very small, no conclusions possible)	-
NUT 3 80% of children (0-23 mos) in the district will have growth monitored in the last 3 months	84% in past 4 mos	80% in the past 3 mos	91 in past 2 mos	75% in past 2 mos
NUT 4 80% of growth faltering on underweight children will be treated according to the protocol	not measured		not measured	-
MCH1 Strengthen the referral systems in outlying areas by establishing 4 rural health/ community meeting centers	0	4	4 sites	-
MCH 2 50% of mothers will know 2 or more danger signs in the antenatal period which requires consult with a professional	25	-	46 3	-
MCH 3 85% or mothers will have had three or more antenatal visits	80	-	83 3	90%
MCH 4 two midwives from each clinic/hospital (total of 10) will be trained in high risk protocols	Not known	10	not done	-
RH 1 Increase to 80% those mothers of children (0-23 mos) who do not want another child in the next 2 years or who are not sure who are using a modern method of contraception	72 1	-	75 6	-

ARI 1 Maintain at 85% the number of mothers who sought medical treatment for their child (0-23 mos) with cough or rapid breathing in the past 2 weeks	78	-	83.6	-
ARI 2 Increase to 50% the number of mothers who know 2 or more referral signs for pneumonia	24 (2 signs or more) (42% dyspnea only)	-	18.3 (2 signs or more) (54.4% dyspnea only)	-
CDD1 increase to 80% those children (0-23 mos) with diarrhea in the past two weeks who receive the same amount or more breast milk during the diarrhea episode	58	-	61.9	-
CDD2 increase to 80% those children (0-23 mos) with diarrhea in the past two weeks who receive the same amount or more fluids (other than breast milk) during the diarrhea episode	54	-	54.9	
CDD3 increase to 50% those children (0-23 mos) with diarrhea in the past two weeks who receive the same amount or more food during the diarrhea episode	32.2	-	32.7	
CDD 4 Increase to 75% the number of mothers who know that a child recovering from diarrhea should be given an extra nutritious meal each day	50	-	not measured in this survey	
HIV/AIDS 1 80% of teenagers (10-19 yrs) exposed to the program will know three modes of HIV transmission, 3 methods of preventing HIV transmission, and 3 implications of early sexual involvement	Measured in another survey	-	See HIV survey	
HIV/AIDS 2 90% of health care providers, including traditional healers, will know at least 3 modes of transmission 3 methods of prevention, and the correct use of condoms	Measured in another survey	-	See HIV survey	
HIV/AIDS 3 90% of teachers trained will be able to teach methods of HIV transmission and prevention and the proper use of condoms	Measured in another survey	-	See HIV survey	

Please see the HIV/AIDS school survey in the annex for more information on HIV/AIDS indicators

Financial summary

1 Project Budget

A budget summary for the four years of the project, excluding the two-month no-cost extension is set out below

Project expenditures by year (including WV matching costs but excluding head-quarters costs)

	year 1	year 2	year 3	year 4†	Total to date
Budgeted	230 058	154,708	259,718	363 158	929,050
Actual	177 875	152,751	235 271	315 781	881,673
Balance	+52 183*	+1,957*	+24,447*	+47 377 ♦	+47,377**
Reason for under-expenditure	Delays in hiring the necessary project staff devaluation of the Rand		delays in construction health stations	delay to the final evaluation because of scheduling conflicts	

*carried over into the next year's budgeted amount

♦carried over into a no-cost extension

**unaudited

Annual budget Each year the BDCSP prepares an annual work plan. This work plan contains proposed activities for the coming year, timelines, and a funds requirements report. This cash flow forecast is set out by months and quarters and set against the budget from the DIP and the annual budget. The projected funds required were further broken down into personnel, travel/per diem, consultants, and procurement, and these set out against the annual budget line item total.

2 Financial management

Movement of funds Funds are requested on a monthly basis by the project from World Vision South Africa (WVSA). Even when funds have been received, until very recently WVSA has insisted on approving all expenditures in excess of R500 (US\$83). Now it is allowed to approve these sums after expenditures have occurred. Funds have been generally remitted by WVSA in a prompt manner after the paper work has been processed. However, this process has frequently taken an undue length of time. It was a recommendation of the mid-term evaluation that this process be streamlined. Little has improved in this respect until the recent restructuring process for WVSA. It now appears that the process may move more quickly with less micro-management in the future.

Management of funds Regular financial statements were produced, and the annual expenditures, set out by month and by quarter for the four years, were examined. These were kept in a logical and concise manner, and reflect actual expenditures against budget amounts with differences noted. Statements reflected the project funds received from USAID and matching funds from World Vision. In general, most capital costs were met from WV matching funds.

Funds are deposited in a local account in Bergville. An additional account is held for staff emoluments which are deducted in the amount of 7% in unit trusts, and payable at the project end or at the termination of employment. This latter arrangement was selected by project staff as preferable to the project providing standard medical and other benefits.

Records are kept by an accountant assisted by a bookkeeper/cashier who handles petty cash.

Audit reports Annual internal audits were carried out by WVSA. An external audit was carried out at the mid-term by Ms. Dee Giannamore of World Vision International. Recommendations from the internal audits included:

- review of the approval limits
- better documentation for large expenditures
- keeping of the asset register up-to-date
- correct coding of cost allocation

The external audit recommended better supporting documents for salary payments to verify employment, the obtaining of three quotes for major purchases, better compliance with approval processes for expenditures and the keeping of an updated asset register. A final external audit will take place shortly.

Technical assistance in financial management The project has received extensive technical assistance in setting up and managing financial records, particularly in the beginning by Mr. Bill Slade. He continues to assist on a part-time basis with financial management.

Lessons Learned

Each team compiled lessons learned about the particular aspects of the project they were evaluating. These applied both to the project and to the district health services into which the project was integrated. The key lessons learned are set out below, and can be found in full in the individual sections of the evaluation.

Overall Project Management

The building blocks for the DHS need to be established by a project as first steps. These building blocks are the strong community relationships and support services to the district facilities.

All resources which are present within a district must be identified, and optimally allocated within a framework to provide priority child survival services. The team providing services (the CSP and its partners) needs to establish its core values and principles in the beginning.

Conscious attention should be given to interventions carried out at the various levels of service provision (namely the community, health facility, and hospital levels), and clear objectives and indicators for each of these levels should be set.

Sustainability

Sustainability of community components requires effective participation of the community from the beginning. A concerted effort to build the capacity of community organizations is needed from the beginning. Community groups, such as the Bergville District Health Forum (BDHF) and CHCs, needed help with basic organizational steps and help with organizing and maintaining their finances. A period of time was required for these organizations to mature to the level where they could work as major partners in the design and management of child survival services.

The early successes of the CHWs promoted community ownership, and contributed to the maturation of community organizational structures. The early emphasis within the project on solid CHW training with a good curriculum and a good support structure was the right priority. The success of this approach influenced provincial adoption of the CHW as a full member of the District Health Management Team (DHMT). Giving CHWs a lower priority or attempting to establish a volunteer rather than a paid cadre would not have led to these successes.

The highly integrated nature of the CSP and the DHS (many interviewed could not distinguish between the two) means that many of the CSP interventions are now wholly owned by the DHS and have been incorporated into their normal scope of work.

Lessons learned—2

Community partnerships

One of the major lessons of this project was the importance of discussion where people are allowed to express and articulate their views, ideas and concerns. There is extensive mutual listening, and outcomes and plans are negotiated together. This dispelled misconceptions on all sides. These processes have included the approach to implementation in general, PLAs, Health Days, feedback meetings and workshops, training, and focus groups. The mid-term and final evaluations, and the regular reflection and listening that have occurred, are further examples. Often these activities are done with outside participation, which helps enrich the analysis and re-planning.

The extensive commitment to training and capacity-building for community members, community structures, CHWs, CSP staff and DOH staff has paid handsome dividends. This has resulted in many kinds of training, cross-visits and the effective use of outside consultants for input and mentoring. The emphasis on networking – the active building of relationships, seeking collaborative working arrangements and synergy – has helped build solid social support for the program, and promoted benchmarking among other health activities, both nationally and regionally.

Information Systems

The district did an excellent job documenting lessons learned as the information system developed, and as training in its use and evaluation of its usefulness took place. Following are some of the lessons learned:

- To start with data and try to make sense of it is fundamentally flawed. If you don't know what you are looking for, you won't find it.
- District information systems needs to be indicator-driven. In this way, only essential information is collected, rather than a pile of data that only causes confusion. In other words, Define indicators before you decide on data items. Do not collect any data items that are not being used in indicators.
- Keep the DHIS tool simple and training needs will be minimal.
- Quality Assurance training can strengthen the understanding of the importance of data for assessing and improving quality.
- While outsiders can provide information, skills development, and facilitation, the DHIS should be developed within the service. There must be a critical mass of interest for any development to begin and survive.
- Flow of information needs to be congruent with the district decisionmaking process, i.e., if someone needs to make a decision about a service, this person needs access to information to make the decision. Therefore, the information system should be congruent with the organizational purpose and design. If it still does not flow, there may be a problem with the organizational design.
- Flow of information should be clarified within the district and the provincial departments to avoid duplication of effort and inefficiency.
- The information flow must include feedback to the gatherers of information, the clinician, CHWs, clerks, etc.
- Information systems reflect the bias of the organization: what (and how) one measures shows what is valued.
- Information systems influence the way personnel perform their duties. The design of a tool, any bias in the information system, and feedback they receive influences their practices.

Lessons Learned—3

IMCI

The training approach used for CHWs provided an excellent foundation for the introduction of the community component of IMCI. This is an important lesson which can be used by other sites where the introduction of the IMCI community component has been problematic or the best approach has not been clear.

A sound curriculum for CHWs can be used for other cadre of personnel working in the community. In the case of Bergville, this was provincial DOH nutritionists who joined CHWs for a six month training in growth monitoring and promotion.

Having a sister from the health facility on the CHC greatly improved relationships between the health facility and the community, and helped integrate the CHWs with facility-based activities, a major issue noted at the mid-term evaluation.

Although not explicitly part of the CHW's responsibilities, follow-up of defaulters from the DOTS tuberculosis (TB) program has improved the treatment-completed results for areas in which this follow-up has been done. However, because of the success of the CHWs there is a risk of overloading CHWs with too many activities.

Although the KPC design has emphasized interviewing mothers, this approach needs to be adapted to areas such as Bergville where large numbers of children are being cared for by grandmothers or others. As the numbers of AIDS orphans increases, it will be an growing problem.

The perceived decrease in children with severe dehydration from diarrhea and also cases of severe malnutrition presenting at health facilities has been a major factor in the acceptance of CHWs by professional health workers. This was spontaneously reported from several locations. Unfortunately the HIS does not separate severe diarrhea from milder cases, and this cannot be documented.

HIV/AIDS

Programs should be co-designed with target populations, using shared values rather than starting entirely with standard methods and programs.

Although the initial emphasis was on improving knowledge and data show this has been largely achieved, this is not necessarily being translated into behavior changes. Incorporating behavior change objectives with appropriate indicators is critically important, but there is much to learn on how to bring this about.

Serious qualitative research methods can greatly enhance the understanding of beliefs and behavior. Through a consultant the project undertook a superb study of behavior and beliefs in schools. A standardized assessment tool, along the lines of the KPC could be developed for HIV/AIDS programs in schools. It would be critical to get serial assessments over time.

This study showed that the Peer Education approach worked for improving knowledge, and further study is needed to determine if peer education can have an impact on the behavior of adolescent school attenders over a longer time, since the impact of this program may not be immediately realized.

The high attendance of the local community at churches (>75%), which was noted in a CSP survey, offers another avenue to youth, particularly those not in school.

The community is now asking CHWs for AIDS education and assistance in home care. Meeting this as part of the extension to the project could be an important achievement.

Lessons learned—4

Maternal care

Over 30% of women are delivering at home but not by choice. When mothers who had recently delivered were interviewed about their choice of delivery site, they said they would rather deliver at a health facility with a trained professional. Due to lack of facilities open beyond 4:00pm, lack of certified midwives at clinics, and absence of waiting areas at facilities for mothers soon to give birth, expectant mothers are left with the option of finding assistance in the village.

The traditional midwives themselves, who are few in the project area, also say they prefer women to deliver at the facilities because they (the midwives) are getting old and don't want to work all night. They offer their assistance, however, when called upon, as families have no other option.

A major cause of infant mortality is perinatal mortality, and few, if any, initiatives address this. It appears that syphilis is an important, but treatable, cause. Although virtually all women in the project area attend antenatal clinic, testing for syphilis is not routine. Adding this service could potentially decrease perinatal loss.

CHWs teamed with visiting mobile health teams is an excellent combination, appreciated by the mobile team, the CHWs and the community.

Although the project's maternal health activities can and have had an impact, the greatest impact will be achieved when these objectives and activities are integrated into a district-wide integrated maternal health program.

Key Recommendations

Each team assessed the achievements of the CSP and produced a series of recommendations. These recommendations in some cases apply to the follow-on project, and in other cases to the DHS, which functions in an integrated manner with the project. The key recommendations are listed below, with the full recommendations found in each section.

Key recommendations for the follow on project, further district activities, and use of findings elsewhere

NB Since this project is so closely integrated with DHS, many of the recommendations made by the evaluation team will apply to the DHS in general rather than the CSP interventions in specific.

Management

District Health Management Team (DHMT) Define the purpose of the district health team and identify its responsibilities. Clarify the organizational structure and the roles and responsibilities of various team members, with the lines of accountability for the project staff and the district management team. Identify the critical members of the DHMT and locate them in district offices.

The "shared governance" concept which is being developed for the DHS can be a very useful approach to team-building at the health facility level. This can help clarify the roles of various positions, particularly the area managers, PHC Co-ordinator, program co-ordinators, and CHWs, and can also help build in a role for community involvement in health services management at the facility level. Introducing this concept would be a way to more closely integrate the hospital services into the DHS.

The chain of responsibility for supervision of health personnel at various levels needs to be made much clearer, both for DOH and CSP staff. A second tier of supervision needs to be developed to ensure that the supervision process is moving well, and that first-level supervisors have the capacity needed.

There is a continuing need to involve the private practitioners in the DHMT, and the traditional healers more effectively in the district's health interventions. This was a mid-term recommendation as well, but there has not been much progress in these two areas.

Sustainability

The project's involvement with and support of the BDHF is highly commendable. There is need however, for continuing and long-term support before the BDHF can play an effective role in the overall management of health services and the development of new initiatives. There was a recommendation that gender under-representation be addressed in several areas. These include heavy male predominance in the BDHF, and an absence of males in the CHW program.

Key recommendations—2

Community partnerships

The next phase of the CSP has significant capacity-building aspects. It should be preceded by a process of clarifying, articulating or developing a coherent statement of the community development approach. From this, a set of strategies and approaches to organization-building should be developed to enable true partnership with communities. Set out indicators, dedicate capacity for the work in the appropriate places, and set out a realistic time-frame. Organization-building is a long-term process, and solid foundations are worth building. In the short-term, the BDHF should be assisted to formally register with the Department of Welfare.

The discontent among CHCs about payment should be unpacked and used to inform the strategy. The project should consider whether it is always necessary to set up a special CHC, or whether existing structures can be used, thus working with what exists—as the CSP has done in so much of its work. There tends to be a multiplicity of structures within communities, often with highly overlapping membership. Many become dysfunctional, but are seldom disbanded. The possibility of using focus groups as a building block—although slowly and organically—in community organizing could be explored.

The farm worker context should be reconsidered in light of the development approach and community partnership ideals. The strategies will certainly need to be refined for specific situations, and the very different contexts should be reflected in plans and expectations of achievements. The experience to date will help inform strategies and plans.

Information systems

Develop a simpler Clinic Tick Register (CTR). Both the facilitator for the Initiative for Sub-District Support of the Health Systems Trust (ISDS) and the District Information Officer (DIO) are in the provincial group providing input on the revised, simplified register to be released by the end of the year. The district must ensure they have the time, logistics, feedback and input needed for their participation. This register will hopefully decrease the amount of time teams (such as the mobile clinics) spend on gathering and organizing their information.

The district information team, in collaboration with the service providers and community, should revisit district and facility indicators to assess their usefulness for performance monitoring.

While data collection is occurring at all levels, its interpretation and use remains undeveloped. The district should increase the use of qualitative data to complement and validate quantitative data, thus allowing the community to provide input. The use of PLAs and special focus groups should be continued to better define community practices, resources and influences on child and maternal health. Area Managers should be encouraged to conduct quarterly meetings with their team leaders and include feedback on information as part of their supervision support visits. The DIO should continue to be supported by the ISDS facilitator to mentor information officers on the interpretation and use of information.

Community information should be integrated into the DHIS and feedback to the community strengthened. A start could be to obtain the tool from Northern Province for “verbal autopsy” at the community level. The DIO and ISDS facilitator should work with Area Managers and CHFs regarding how the CHW information can be linked to the DHIS. This could also be used as an opportunity to explore avenues, tools, and resources to improve district mortality reporting as a whole.

Key recommendations—3

The ISDS must continue to support and mentor the DIO to obtain feedback on the report layout and use, and make adjustments accordingly

IMCI

Health worker performance and training

Improvements in knowledge, skills, interpersonal communication and counseling skills of health facility staff are needed. An overall district assessment of training needs would help set priorities for which skills need most to be improved.

Components of IMCI would particularly benefit from improved supervision support to health centers and mobile units.

The current DHIS should be used to strengthen the use of information at each level for management and decisionmaking about IMCI. Integration of the community-based information with health facility information is needed, particularly in areas of child health.

CHW performance and community perceptions

There is a need to address the emerging problem of HIV/AIDS and AIDS orphans at the community level. However, CHWs should not be over-extended beyond their ability and the time they can spare. The need for home care services is clearly emerging. With the strong CHW network, and the emphasis on HIV in the coming project, this needs to be considered to lessen the impact on households and children.

There is still a need to ensure consistency of messages at all levels and from all sectors.

HIV/AIDS

An alternative to overburdening the CHWs with additional HIV/AIDS activities might be to train community-based HIV/AIDS Communicators (HACS). This could be grafted into the already-strong community links in this project.

Special attention should be given to supporting and training young women in prevention. For example, during condom education, young women should be taught how to make condoms more appealing to their partners.

Community participation should happen at all levels of the program to ensure ownership. Young people should be given a chance to develop projects that address their own needs, with adults in the project and in the schools giving only their support and encouragement.

Service providers at the health facilities should be encouraged to continue to be as adolescent-friendly as possible. The project can help support counseling at the facilities, and link this with the on-going community efforts. Hospital- and clinic-based counselors should be informed of the location of other counselors. If counselors were connected in this way it might serve to support counselors and assist in referrals. Counselors need mentoring and support from supervisors, and building a network would be an important step.

All role players involved in family life and sexuality education should be mobilized, e.g., church groups and parents. Reluctant role players, such as certain church groups, might find a relevant role in certain tasks, such as assisting their members to talk with their children about sexuality. There is already interest in this by one Bergville clergyman, and the on-going seminary program in Pietermaritzberg might be approached for more ideas.

Efforts should be made to strengthen the relationship between private practitioners and the CSP. For example, the DOH and the CSP could supply private practitioners with

Key Recommendations—4

free condoms and information about the Syndromic Management Protocol. Technical meetings on topics such as the syndromic approach should be held at times when private practitioners can attend.

Maternal Care

A fully representative maternal health team for the district must be formed. Representation from the community, CHFs, mobile teams, facilities and hospitals is needed. The team should be co-ordinated by a district advanced midwife, supported by an interested medical doctor. The team's role would be to plan maternal health services, monitor quality of the services, run and document perinatal mortality meetings, report to the District Health Management Team monthly on maternal health services, and make recommendations to ensure health facilities are suitably equipped for maternal health services.

Mobile clinic services should be supported and given in-service training by an advanced midwife, and participate in perinatal mortality meetings. Its role needs further study, and the referral and laboratory services need urgent improvement.

The concept of *Health Stations* is excellent and these should be opened without delay. At the clinics, maternity services should be offered 24 hours a day or not at all. Clinics should offer a shelter where mothers can wait until labor begins. Each facility needs 24-hour reliable telephone or radio service and access to reliable transport. Antenatal care must be provided at all services in the district. Information management must be improved.

Health worker skills Common management and referral protocols used in all services in the district and maternal health services should be supervised weekly by an advanced midwife. Emphasis should be placed on improving perinatal care, and regular mortality and in-service meetings should be available for practitioners.

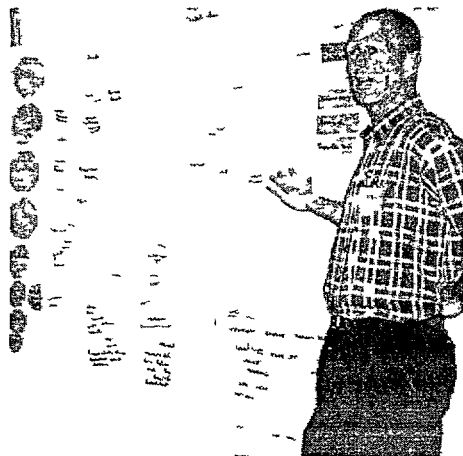
Emmaus Hospital should work with and as a member of the maternal health team. This would include providing primary level service for people near the hospital – ANC and deliveries, referral service for the sub-district e.g., caesarean sections and complicated deliveries. The hospital clearly needs one person in charge of the maternal health services in the hospital, preferably an advanced midwife. The hospital should take the role in running perinatal mortality meetings for the sub-district, and offering Perinatal Education Program (PEP) training for nurses and doctors at the hospital.

Maternal Health information A comprehensive information system for maternal health is needed, with the following components: the patient carrier card, the maternity case record, the labor ward register, and aggregated monthly statistics from all health facilities. These are either absent or incomplete in the district.

Project Management

How the team collected the information

The team first defined the information it needed to evaluate project management. This information was broadly categorized under organizational, programmatic and financial sustainability, and sub-categorized into community, project and clinical services. The team was then divided into groups that addressed each of these areas. This section of the report addresses the sub-categories dealing with community and project services. Those aspects related to clinical services are dealt with in the sections of the report that look at the IMCI, Maternal and Child Health, and HIV/AIDS components.



Diagramming district and project management for the evaluation

Project management as it related to the development of the district health system

The information was collected primarily through interviews with individuals and representatives of various organizations which are affiliated with the BDCSP. They are listed at the end of this section.

Project goals and objectives

The goals and objectives relating to the development of the DHS were not clearly stated as part of the BDCSP objectives. Rather, these aims were set out in the project's guiding principles, summarized in the introduction to this evaluation, and promulgated in detail in the text of various other project documents.

However, the goals and principles that were noted in some of the project documents are outlined below.

Facilitation of District Development and Services in the District by the Project Using the PHC Approach

The mission of the KwaZulu-Natal Department of Health is

"To develop a sustainable, co-ordinated, integrated and comprehensive health system at all levels, based on the Primary Health Care Approach through the District Health System."

The Primary Health Care (PHC) approach embodies the concept of community development and is based on full community participation in the planning, provision, control, and monitoring of services. A DHS incorporates many interrelated components which contribute to health within a well-defined geographic and administrative area. It includes self-care, all categories of health workers—up to and including the district level hospital—and all appropriate laboratory, other diagnostic and logistic support services.

A major factor in the development of both the project and the DHS has been the application of quality assurance methods, in which both the Project Director and Project Manager received training at Johns Hopkins University. This training has emphasized the needs of the users of health services, the importance of data in tracking performance, standard-setting, use of teamwork, strengthening the processes through which services are provided, and forging good communication channels with the community, the client, and within the health system. These methods are used within a problem solving framework. Knowledge of methods has been passed

on to project staff and others. The district has worked with the province in addressing quality issues, and nationally in establishing standards.

It is clear that the BDCSP has contributed significantly to the process of district development since the mid-term evaluation two years ago. It is also clear that this is a process in which the end goal will never be reached, but merely re-defined with time, in response to changing community needs and developments. Previous systems, structures and relationships will be compared with current organizational structures. The need for future organizational changes will also be discussed in the next section.

The development of different services and programs and their progress against goals and objectives have been examined by other teams.

Incorporate Sustainability into all Project Components

This section is dealt with in detail in the second part of this report.

Maximize Use of Local People, Local Resources and Appropriate Technology

The BDCSP has done much work in building the capacity of local people and in using all opportunities available. These include the training and employment of health motivators for doing education and training at schools. Many BDCSP staff have been trained in the use of computers and related technology. The project accountant, joining as a new graduate, has become a proficient financial manager. The development of project staff has been extremely successful, with many of the successes of the project attributable to experience gained by staff during training. Examples include training on quality assurance and transformational leadership.

Promote a Team Management Approach in Implementing all Aspects of the Program

The development of management teams has been strong both in the project office and with the district management team. The concept of a team approach has been introduced at the clinic level, but the evaluation has identified areas which require strengthening. This is elaborated upon further in the next section.

Processes by which the goals were achieved

This section explores the development of the DHS by looking at the following aspects:

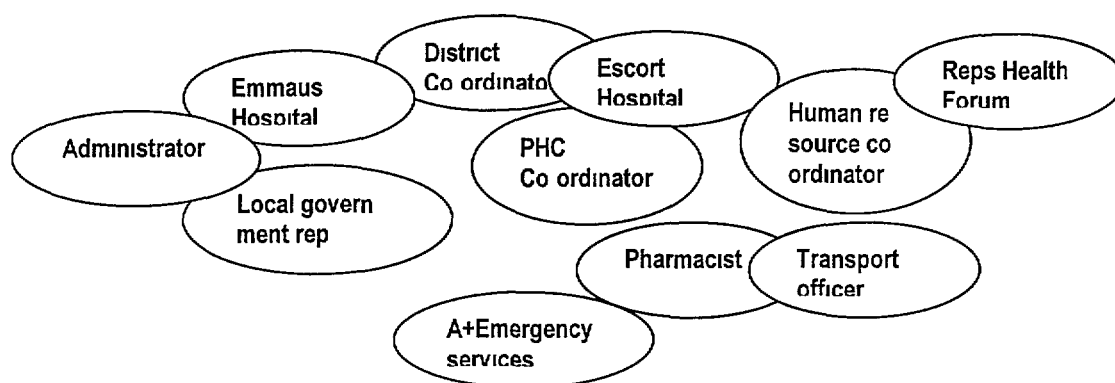
- The establishment of a District Health Management Team (DHMT), and the relationships in the sub-district
- The provision of services from the facility level and the effects of current practices in terms of the PHC approach and the DHS

The establishment district management team, and the relationships in the sub-district

This section looks at how the DHMT was established and some of the aspects of its functioning.

A DHMT has been established through a very transparent process (workshops and consultations with various groups had taken place) of identifying the team members required for effective functioning had been undertaken. The team members are illustrated below, this being a reflection of the manner in which the members were grouped during an interview with the DHMT.

Current Structure of the District Management Team



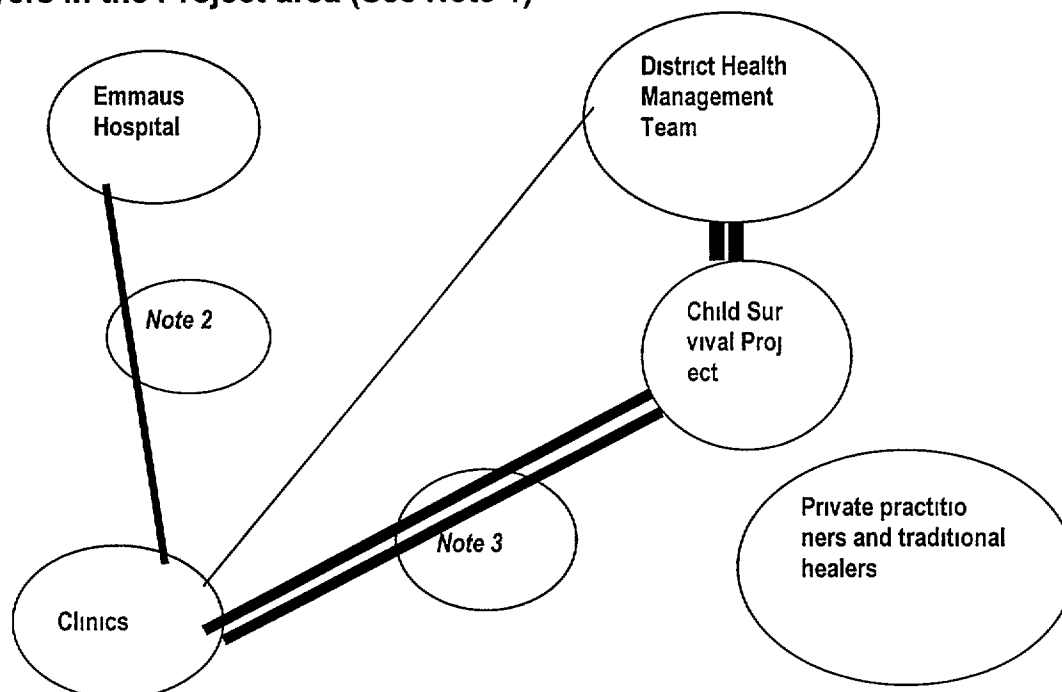
Because team members came from various institutions and sub-districts, the team met twice a month at Emmaus Hospital. Meetings were conducted using skills developed through the Transformational Leadership course. Roles of team members had been defined as above.

However, during the evaluation it became apparent that

- This was a functional grouping of role players who had contributions to make towards district development. It was less of a “management team”, and more of a “district development team”. Many of the role players in the DHMT did have job descriptions, but it appeared that more thought was required around the organizational structure of the team (who reports to whom, and who carries which responsibility),
- The PHC Co-ordinator had a large number of people reporting to her (all the co-ordinators, which included the HIV/AIDS, TB, nutrition, communicable diseases, MCH, mental health, rehabilitation services, school health, and environmental health co-ordinators, the DIO, the BDCSP staff and Area Managers). It is at this level that the project has its strongest links with the DHS, and where the greatest influence has been in improving services to target populations.
- Many team members had various responsibilities. Some had understandable difficulties in shedding their institutional perspectives when considering wider district issues. This could compromise the role of the DHMT in dealing with issues among its component members.

The strength of relationships in the sub-district were illustrated through the following diagram

Diagrammatic representation of the strength of relationships between role players in the Project area (See Note 1)



Note1

Community structures have been not included (this has been addressed by a separate group)

This refers to the current project area which will in future be a sub district within the district. A second sub district will therefore relate to the DHMT as well

Note 2

The relationship is a formal one, based on a formal requirement for the hospital to provide certain services to the clinics. However, it must be noted that there has been a great deal of enthusiasm expressed by both hospital and clinics about strengthening this relationship

Note 3

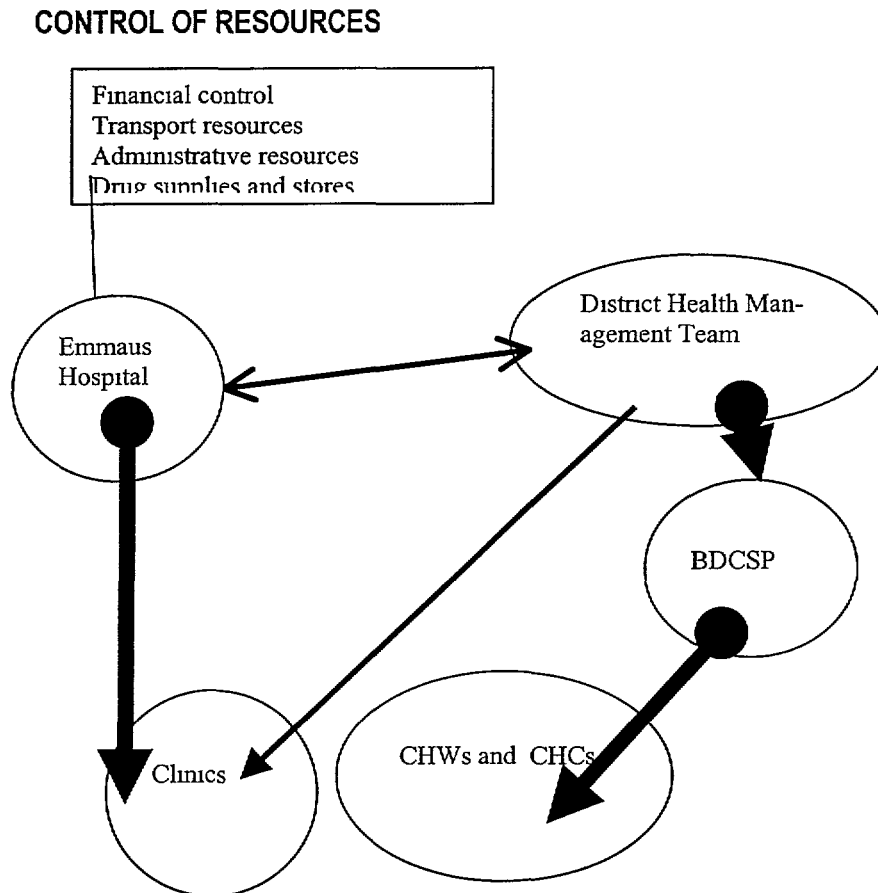
This relationship is a much less formal one. It is almost a passionate relationship founded on a common goal and supported by friendly relationships and co operative arrangements

From this it can be seen that the relationship between BDCSP and clinics is strong. The relationship between the DHMT and BDCSP (or at least among the members of the team) is also strong. However, the links between Emmaus and the DHMT are weaker, and non-existent between Emmaus and BDCSP. However, Emmaus has strong links with the clinics through the following means

- Doctors' visits to clinics
- Pharmacists' visits to clinics
- Drug supplies being delivered from the hospital to the clinics
- Laboratory services being provided to clinics by the hospital

The relationships in terms of authority and management support were explored and the following became apparent

Diagrammatic representation of the power relationships between role players in the Project area



Resource flow in the district

It becomes apparent that in reality, the hospital is the main source of services to the clinics, and as such, can in fact exert substantial authority over the clinics. The district management currently has little control over the clinics, other than through the district hospital.

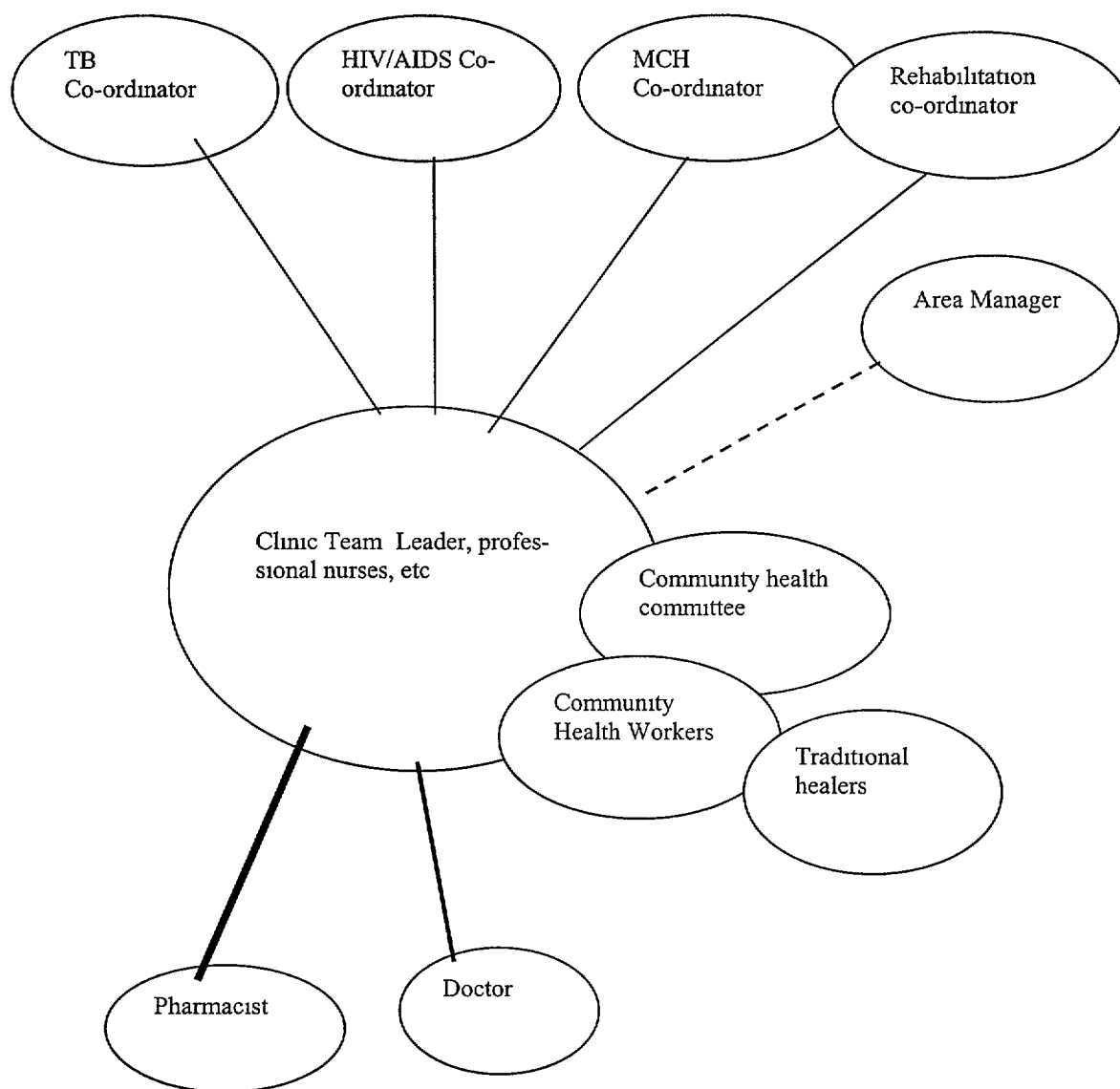
Evaluation of service provision from the health facility level

Despite the arrangements to provide support services to clinics described above, there appeared to be a clear message coming from the clinic staff that they felt neglected.

- Area Managers did not visit frequently enough,
- In-service training of staff took place only infrequently,
- Many of the resource people in the district were “visitors”, rather than integral team members at the clinic level (see diagrammatic illustration below),
- Clinic staff still required training, but the frequency with which staff were able to attend training programs was not sufficient to address the training needs at district level, let alone to address the attrition rate and the rate at which new staff came into the district.

In order to understand how this happened, the following diagrams were drawn and reviewed by various members of the management team and other evaluators

Diagrammatic representation of some relationships at clinic level



From this it can be seen that

- The relationship with the pharmacist is reasonably strong because of his assistance in strengthening the stock control system. He also visits the clinic on a monthly basis,
- The doctors' relationships are fairly formal, although weekly visits take place,
- The relationship with the Area Manager is poorly defined and not effective,
- The team is subject to visits from various co-ordinators who do not necessarily work through the Area Manager,
- The less well-defined position of the district management team in relation to the hospital and clinics is in contrast to the strength of the relationship between the clinics and the hospital (through the provision of services as described above),
- Private practitioners are not included in the pool of doctors,
- The reports obtained from other evaluation teams confirmed our impression that the traditional healers (THs) were ready and willing to meet with the health department. The

DOH had gained credibility, largely through the work of the CHWs, and there were many informal associations between the CHWs and the THs

The purpose of the Area Managers is to

- co-ordinate service delivery at clinic level
- to provide support to clinic level staff (clinics, mobiles, and health centres)
- to mentor staff at clinic level

While it appeared they had a reasonable understanding of what this meant, they were not able to achieve their goals because they

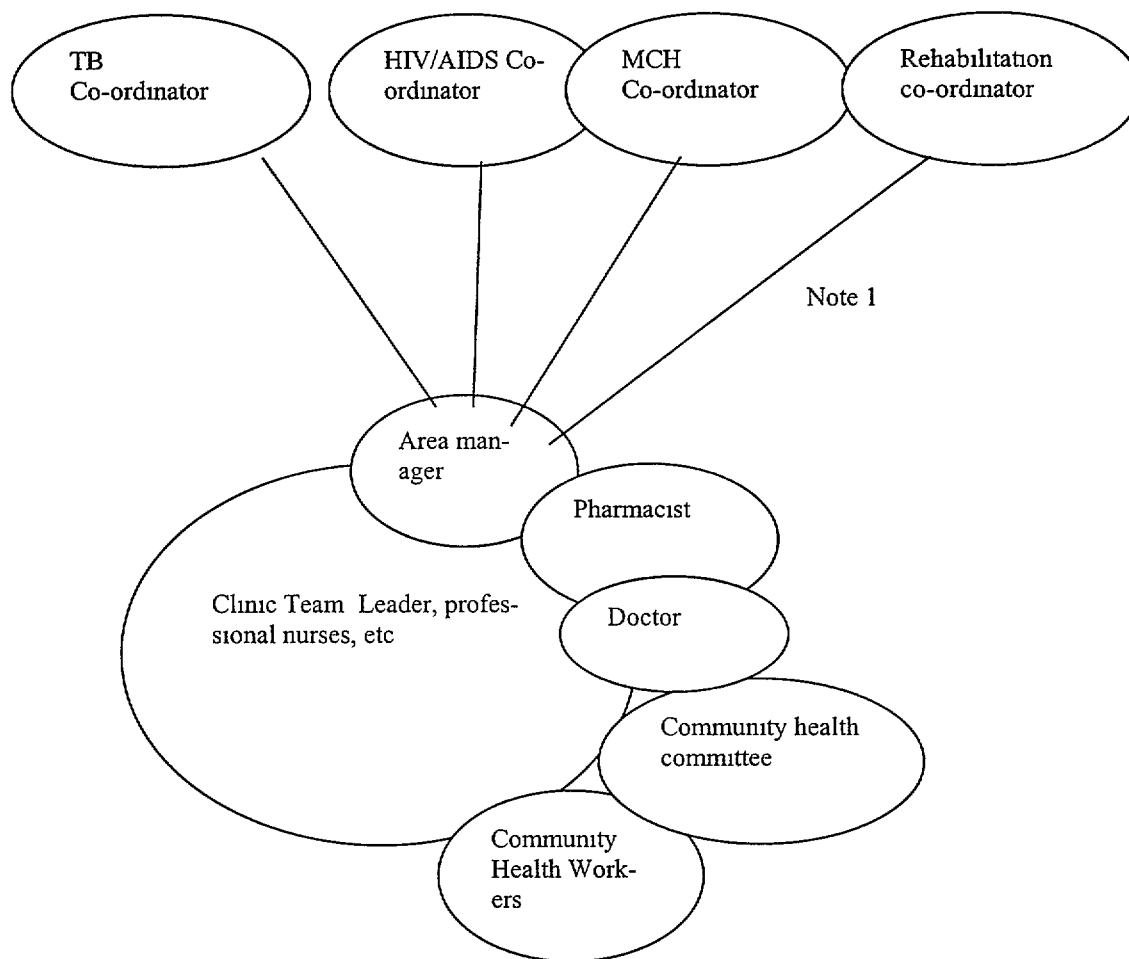
- only visited clinics on average once a month
- had to attend many workshops and meetings
- sometimes also took on the role of co-ordinator
- had infrequent access to transport
- were working from a base which was too far from the sites they supervised

The evaluation team questioned whether having Area Managers report to the PHC Co-ordinator was in fact the most suitable arrangement, and whether it wouldn't be better to have a flatter structure between the PHC Co-ordinator and Area Managers. The roles of the 2 groups (PHC Co-ordinator and Area Manager) need to be clarified. It would appear that the Area Managers have responsibility for quality of care issues (technical service delivery), as well as responsibility for administrative issues (e.g. filling of posts, training, etc) and service development (provision of outreach services, referral patterns, etc). The PHC Co-ordinator would then presumably be responsible for the co-ordination of quality of care services and service development issues. The linkages between the PHC Co-ordinator, Area Managers and other co-ordinators, and how they relate to the clinic staff, need clarification. In addition, transport arrangements need to be addressed.

- Most transport seemed to flow between the hospital and clinics,
- Area Managers need to better use the existing transport flows (opportunistic lifts to clinics, e.g., with doctors or deliveries could not take place because they were outside of the transport route),
- They felt if they were located at the clinic within the area they supervised, it might solve the problem. This may not be the best solution, and a detailed analysis of transport flows in the district may be useful in coming to a better understanding of how transport could be used optimally.

In reflecting on the provision of services at clinic level, the following was suggested as an alternative arrangement

Diagrammatic illustration of the suggested relationships at the clinic level



Note 1

These lines (which represent interactions e.g. in the form of training, communication, etc) may in fact be directed towards the doctor, pharmacist, or any other members of the team at the same time as being directed towards the Area Manager or at different times

This picture illustrates the “Team” concept, with various resource people contributing to the provision of services at the clinic. The “Team” should determine the services to provide, and the training and other needs at the clinic. They would therefore moderate the input from the various co-ordinators, and call on their expertise when needed. On the other hand, the co-ordinators would work with the Area Manager in developing his/her skills in supervising and supporting the team in the clinic in that particular area of service provision.

A more clearly defined outline of how the team is to function, including descriptions of how various members contribute to the effective functioning of the team, is required. Elements of this are already in place, but require refining. The core package process will further strengthen the team concept.

Constraints

Many of the constraints to this aspect of the project and its future development have been explored. In general terms they are related to

- Clarifying roles and responsibilities, and channels of accountability and communication,
- Involving role players who until now have been excluded (especially traditional healers and private practitioners) and not appropriately included (the hospital and Area Managers),
- The extent to which resources can be mobilized to support the clinic level of service provision

Lessons learned and their application

- The building blocks for the district health system need to be established by a project as first steps. These building blocks are the strong community relationships, and support services to the district facilities
- Creating common vision and goals has facilitated binding the team members together in a common purpose
- All resources which are present within a district must be identified, and optimally allocated within the framework providing priority services (the principles of the DHS, and PHC approach apply here, as do the core values and principles by which the team operates)
- Conscious attention should be given to the various levels of service provision (namely the community, health facility, and hospital levels). This requires that proposed services be explicitly identified, with indicators related to objectives

Recommendations

Regarding development of the DHMT

- Define the purpose of the DHMT, and identify its responsibilities,
- Clarify the roles and responsibilities of various team members, and the lines of accountability,
- Clarify the organizational structure of the DHMT,
- Identify the critical members of the DHMT, and locate them in district offices

Regarding the development of services at clinic level

The team concept should be strengthened at the clinic level through

- a) initiation of the shared governance project which would
 - define the range of services to be provided at the clinic level
 - bring the various role players together to provide these services
- b) clarification of members of the clinic team, their roles, and purpose of meeting
- c) developing a more realistic district training plan which would
 - determine the numbers of staff required to be trained, including accommodating attrition processes,
 - the time frames within which the staff were required to be trained,
 - the numbers that could be trained on any existing training programme,
 - the number of training programmes that were therefore required in order to address the need within the given time frame,

d) clarification of what is entailed by “supervision ” It has many facets, and given the principles and core values that the district has adopted, has interesting implications about what supervision should look like While not wanting to spell this out in detail, the following aspects have become apparent during the evaluation

- how to supervise is not always clear,
 - the requirements for supervision differs at various levels o service delivery, between individuals at the same level, and between ranks of staff The needs of each of these need to be considered,
 - those providing supervision and support, need to be adequately supervised and supported in order to enable them to be effective in their roles
- e) that the DHMT use its human resources in the more efficiently, namely
- include private practitioners and traditional healers in the DHMT,
 - include the hospital staff in the district services in a more meaningful way
- f) that the DHMT strengthen its relationship with the clinics and the hospital by
- implementation of the shared governance project, which will hopefully bring all role players (human resources) together in achieving shared objectives,
 - actively defining the hospital’s role in the DHS, and in particular in supporting the PHC services at the clinics,
 - evaluate the use of transport and transport flows in the district,
 - clarify the position and lines of authority of the Area Managers and improve their functioning (base from which they operate, use of transport, etc)
 - clarify the position and lines of authority of the PHC Co-ordinator and improve his/her functioning
 - clarify the position and lines of authority of the other co-ordinators and improve their functioning

Members of the team

Dr Vincent Shaw

Dr Helga Holst

People with whom we spoke

Interviews were conducted at the child survival offices, the district management offices, Emmaus Hospital each of the five clinics, with several private practitioners and in the community with (CHWs) Community Health Facilitators and community members, including several traditional healers Members of the Bergville District Development Forum (BDDF), the Bergville District Health Forum (BDHF), the Child Survival Project (CSP) Management Team, the Emmaus Hospital Management Team, the hospital doctors, the District Management Team (DMT), the Regional Office, and the Area Managers were also interviewed There was also much documentation available of work done, and some of this was reviewed

- 1 Bergville District Development Forum
Mr Nkabinde (Chairman), Mr Mabizela, Mr Xhala (Chairman of Thutukani, organization for the Disabled), and five other members of the BDDF
- 2 Child Survival Management Team
Dr Gary Morris (Project Director), Monika Holst (Project Manager), Ms Sibongile Maphalala and Mrs Gabi Mazibuko (Area Managers)
- 3 Emmaus Hospital Management Team
Dr Harry Williams (Acting Medical Superintendent), Ms Cesca Papenfuss (Hospital Secretary), Ms B E Mdlalose (Deputy Matron)
- 4 Emmaus Hospital Doctors
Dr Harry Williams, Dr Samantha Padyachee, Dr Bhekı Zondo, who are permanent hospital doctors and Dr Martin Perez There were two Community Service doctors present There was Dr Johann During, who opened a private practice in Winterton a month ago
- 5 Dr Gary Morris on the role of the CSP

- 6 Traditional Healers (Mrs Maphalala, Mrs Gumbi, and several others)
- 7 District Management Team
Dr Gary Morris, Mrs Elsie Mbhele
- 8 Health Forum
Mr Khumalo (Chairman), Mr Sithole (Vice Chairman), and seven others members of the Health Forum, each representing different organizations and communities within the district
- 9 Community Health Workers
- 10 Area Managers
Mrs Gabi Mazibuko, Ms Sibongile Mpalalala
- 11 Member of the Regional Office
Mrs Lauraine Bryciewicz
- 12 Mr Asmal (Bergville businessman)

Sustainability

Project management as it related to sustainability

Information collection

The evaluation relied on visits, interviews, observations, key informant discussion and focus group discussion with mothers

Project goals and objectives related to sustainability

- To facilitate the integration of community resources with the DOH infrastructure and program to establish a sustainable cost effective delivery system for child survival interventions
- A major project principle is to incorporate sustainability in all project components

Sustainability analyses were carried out using the following format

	Community Level CHWs/CHC/Health Forum	Interventions IMCI/HIV/MCH	District & Project Man- agement
Organizational Sustainability			
Programmatic Sustainability			
Financial Sustainability			

Process by which goals and objectives were achieved

Health Forum

Organizational sustainability

The BDHF, the existing health forum, operated as health task force before the project started. It evolved into a health forum through a process of consultation. The initial contribution of the BDHF to the project was to facilitate needs assessment by eliciting the community's views. The BDHF is comprised of representatives from five sub-district levels, the TLC (Transitional Local Council), tribal authorities, Amakhosi developmental committee, local DOH, farmers association, business association, private and public doctors, etc. Generally, it seems to be well represented.

The structure of the BDHF has facilitated communication between communities and health authorities, ensuring that health problems are identified and adequately addressed. However, to date the BDHF has not gone through the formalization process of registration with the appropriate authority, i.e. the Department of Welfare. The BDHF thus does not have any legal standing, making organizational sustainability beyond the project phase questionable. It is commendable that they have managed to open a bank account, although with inadequate funds.

Despite the established structure of the BDHF, there appears to be no definite framework of responsibility and accountability. The BDHF was not quite sure whether they are accountable to the community or to the DOH or CSP management. They were not sure where they fit in the

management structure of the district. Interestingly, many of the members perceive their primary role as health *promotion* rather than management.

The relationship with traditional healers needs attention. Much has been done by the project, but not to the satisfaction of the traditional healers themselves. The BDHF accepts that the traditional healer has not been satisfactorily integrated into the formal health care system.

The training and capacity building activities were introduced late in the first phase. The BDHF feels that they have acquired useful skills like proposal writing, negotiation skills, financial management, etc. However, it was not possible to ascertain the effectiveness of the application of these skills as they have not had a chance to apply them.

The constitution has been developed and is enforced. However, the bylaws should provide guidance regarding finance operations, e.g., who are the signatories, who authorizes expenses, etc. The constitution should facilitate financial transparency by ensuring that the balances and major expenses are shared with all the members of the forum. The constitution needs to have a sub-section to ensure gender balance.

Organizational Maturity

The members of the BDHF have matured greatly over the life of the project. During the past several years they have shown the capacity to initiate and follow through on health activities. Recently they have started writing grant proposals on their own initiative.

Programmatic sustainability

The BDHF recognizes the changes in the community brought about by the project. The areas identified are safe drinking water, development of health facilities, general improvement in the standard of living, community awareness, etc. The sustainability of this aspect would need supervisory support from the DOH.

It was not clear to what extent the larger community has a sense of ownership towards the health facility or other developments mentioned above. It has been widely recognized that if the community has a weak sense of ownership, the maintenance and sustenance of such facilities would continue to be the responsibility of the external agency who developed them.

Financial Sustainability

The forum has a bank account but does not have a regular source of funding. They seem to be a motivated group of people who are proud to be associated with the project. They felt that the project satisfies their developmental need, which helps them get going. However, there is the danger they may lose interest without a regular source of support. The BDHF is waiting for the government to provide financial support, which has not yet come. The BDHF does not yet realize the importance of generating and using local resources to sustain their activities. The project needs to assist the BDHF in establishing mechanisms of financial sustainability, primarily from local resources as an alternative-financing scheme, in case the government is unable to provide support.

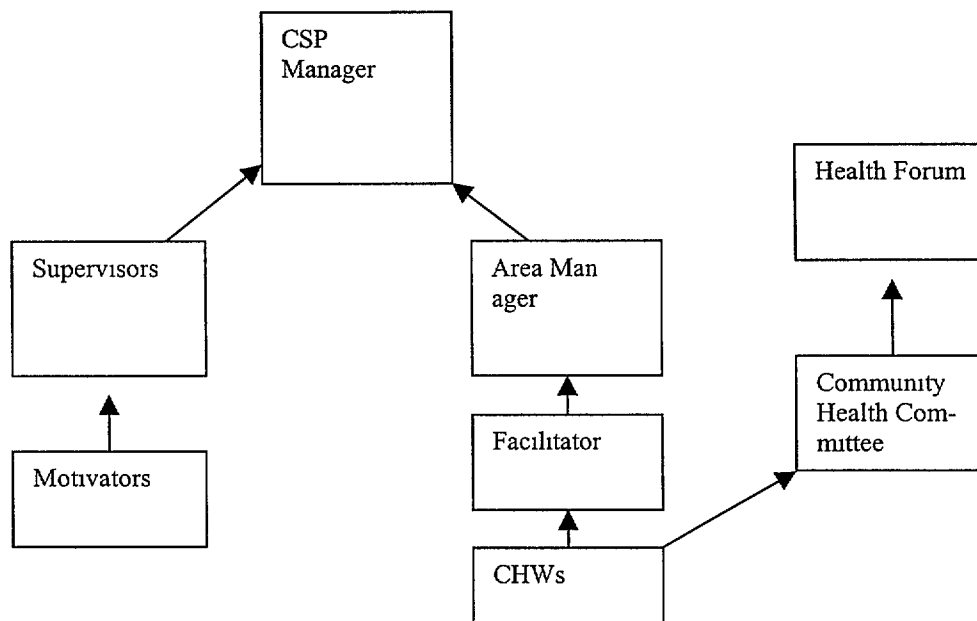
Community Health Workers, Motivators and Facilitators

Organizational sustainability

The CHWs report to CHF's who in turn report to Area Managers and to the Project Manager. CHWs also report to Community Health Committees (CHCs) in their area, which are composed of community members. CHWs generally report to the CHC when there are problems identified in the community. At the same time there is another cadre of workers called

“motivators”, who work with the schools and report to the supervisor, who in turn reports to the Project Manager

The following diagram reflects the organization and relationship of the health workers as understood by the CHWs and the motivators



The organization of various workers at the community level is not always well understood. The motivator is reporting to the supervisor, who reports directly to the BDCSP Manager. The CHC and the Area Manager seem at times to be by-passed.

The CHWs were very motivated. They have come up with their own uniform for the Health Day, although they wished the project would help provide a uniform which reflected their identities as CHWs. The money paid to CHWs is considered a token of appreciation by CHWs and not as a salary. They felt they would continue even if the project ceases, even though they didn't think mothers would be able to pay them for their services. However, when the mothers were asked about this, they said they valued the services of CHWs and would not hesitate to pay them, provided they had the money to do so.

All the CHWs are women. If men were more directly involved it could strengthen sustainability. In addition, it was noted that on the health day all the participants were women. Men need stronger encouragement to consider the health needs of their families.

Programmatic sustainability

It is commendable that all the CHWs interviewed were clear about their roles and responsibilities. They are aware of their success. They described their achievements by highlighting the following:

- breast-feeding has increased in the community,
- relationships between the DOH and the community have improved,
- all children are now immunized and have their immunization cards,
- they have observed a reduction in bottle-feeding of children (except with some new mothers)

They were proud of their work, and feel they have many responsibilities. This pride in their work strengthens the sustainability of the CHW, but they should take care to avoid seeing themselves as superior to the communities they serve, which would create a barrier between themselves and their patients.

CHWs are propagating health messages through song and dance as well. The messages seem to be received well by school children and community members. One of the teachers was interested in joining the school health program. The project may wish to involve the teachers more actively.

It was noted that the CHWs were not supportive of what the traditional healers (THs) were doing, as they clearly thought that the health practices of THs are wrong. They cited an example that while CHWs advise mothers to give more fluid to the child with diarrhea, the THs recommend removing water from the body of the child by administering enemas. For long-term sustainability, it is vital that all the health care providers work in harmony.

It was noted that the relationship between CHWs and mobile clinic staff was good. CHWs thought it would be good to also be introduced to the doctors working at the health facility to which they often refer cases.

The CHWs interviewed were relatively young women. In other parts of the world it has been noted that younger CHWs are often not taken seriously by older women, although this did not seem to be a problem in the project area.

It was noted they had good technical back-up from the CHF's.

They said in order to be more effective they needed training in first aid, and mothers agreed and added that CHWs should also offer treatment for minor ailments. Mothers thought CHWs should work with the Department of Welfare to provide clothes for orphans, and expected support from them during childbirth. They strongly recommended that CHWs be trained in this area.

CHWs thought that in order to work more efficiently they needed transport, as many have to cover long distances. They also felt overworked. The project may have to undertake an analysis of CHW workload.

Financial sustainability

The CHWs are currently paid by the BDCSP, but the DOH has made a commitment to take over their salaries. If the DOH does indeed assume responsibility, then sustainability would not seem a major problem. Other avenues of CHWs remuneration need to be explored. It was encouraging to hear that mothers value the CHWs services and were willing to contribute, provided they have consistent sources of income.

Constraints

The unique political history and the wide gap between rich and poor makes it difficult for all members of the community to have equal access to services. Inequity is therefore a fundamental challenge in the future.

Lessons Learned and their application

- For equitable representation of the community, the composition of the BDHF needs to reflect the existing interest groups/stakeholders
- Capacity-building needs to start from the beginning of the project so that the skills developed can be put into practice
- Visible achievements can enhance the enthusiasm of the community, thereby improving their participation and involvement and thus the chances of sustainability
- Health messages communicated through song and dance are well-received and accepted by

- the community
- The age of the CHW does not matter if they are knowledgeable Mothers seem to have accepted CHWs who are younger and often unmarried
- The community's expectations of CHWs have far surpassed what the project prepared them for This calls for modification of the CHW curriculum

Recommendations

- 1 The leadership role of the BDHF needs attention, since many members perceive it as similar to that of CHCs
- 2 More is required to build the confidence and self-image of BDHF members Many lacked confidence and said "we are like children and need to be fed "
- 3 The project needs a strategy to improve the relationship between the traditional healers and the formal health system
- 4 The constitution of the BDHF needs specific bylaws for financial management The constitution needs to ensure gender balance
- 5 A sense of community ownership of health infrastructure (facilities) needs to be nurtured within the communities Long-term maintenance of facilities depends on this sense of responsibility
- 6 The BDHF needs assistance in seeking alternative financing
- 7 CHWs need assistance in exploring alternate sources of income or other material support
- 8 Strategies are needed for involving men in the health-related activities

Members of the team

Dr Salim Sohani, Dr Boniface Maket

Members of the health forums that were interviewed

- 1 Mr Nelson Nxumalo, chair of Health Forum He is the councilor of the Amangwane tribe and he represents the tribe in the tribal authority He is also the member of the Development team of Amongwane
 - 2 Mr S S Sithole, vice chair of the Health Forum
 - 3 Mr Mike Mazibuko, member of the health forum representing the CHWs He is from Magagangozi
 - 4 Esther Khumalo, member of the health forum representing from Rooihoek She is also chairperson of the traditional healers
 - 5 Ms Jabulile Mdluli, member of health committee from Maswazini and member of Health Forum (HF)
 - 6 Ms Maria Hlongwane, member of HF from Zwelista and Chairperson of the health committee of her area
 - 7 Gertie Nbaba from Tintwa and member of HF and member of executive committee of the HF
 - 8 Mr Themba Michael Ndlovu from Okhombe area Member of Health Forum and Deputy and BDDF and also represent the Amazizi tribe He is the executive committee of the health forum
 - 9 Ms Prudence Lubhede member of HF from Okhombe area and she is also the chairperson of the health committee of her area
- B Community Health Workers and motivator
- 1 Phindile Zimba, CHW
 - 2 Khunjuliwe Kheswa, CHW
 - 3 Zodwa Miya, CHW
 - 4 Zanele Mchunu, motivators
- C Some 20 mothers participated in focus group discussion

Community partnerships

The Team

Tessa Cousins, Elliot Makhatini, Noma Mkize, Sibongile Maphalala, Gabi Mazibuko, Mary Kawonga (1day)

Approach

Review of literature, CSP survey reports and the follow-on plan, interviews and focus groups with various stakeholders, field visits (some with other teams), and observation of the Health Day

The team broke down the term “community” into broad categories, noting that there are three distinct areas within the district with differing land tenure and governance arrangements. These are 1) tribal areas, 2) black-owned freehold areas, on which are landowners and many tenants, and 3) white-owned commercial farms, where farm workers reside and work. The team sought interviews with all categories, expecting significant differences which would be relevant to partnerships.

Approaches Pertaining to Community Partnerships

Goals, strategies, principles and methods for community partnerships were set out from the beginning for the project. The team extracted these from the project documents and assessed how these were followed in implementation. This area of community partnership is full of terminology which is used loosely within the development sector but which has no standardized meaning, which complicated the task. Terms such as “genuine community involvement”, “community partnership” and “a community development approach” often are viewed in different ways.

Project principles, strategies and goals

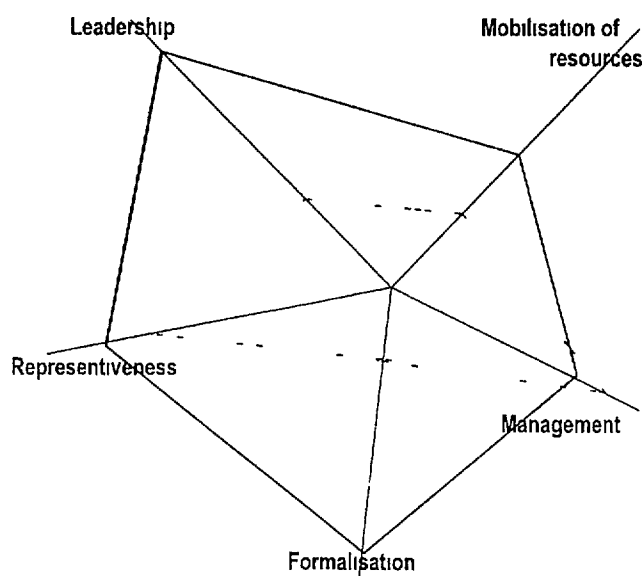
- Improve community management capacity to improve child survival-related program activities
- Enable under-served communities to nominate and organize CHWs
- Facilitate integration of community resources with DOH infrastructure and programs
- Effect genuine community involvement within a community development approach
- Learning with communities
- Be transparent and accountable
- Maximize use of local people, resources, and appropriate technology
- Promote a team management approach

How far were these met?

Improve community management capacity to improve CS-related program activities

We considered the BDHF, which was established prior to the project, as a forum in which community representatives have a strong role. The BDCSP has provided support to the BDHF with significant levels of training and administrative support, for it is seen as the body which can represent community interests at the district level, and BDCSP hopes it can grow to play a stronger governance role in future. The other relevant community management institutions are the Community Health Committees (CHCs). These have been established largely through the project, as they are the bodies that supervise CHWs and provide the conduit for their payment. They also now form a major vehicle for community representation to the BDHF. They are more recent and have been given some training. We visited and interviewed only one CHC, and there

is bound to be significant variation between them, but we are satisfied that what we present represents the broad pattern



Indicators of institutional capacity

Representation of the health interests of communities, the degree to which they do this, and are seen as legitimate by their constituency

Leadership vision, make plans, take action, initiate, and respond to changes

Mobilization of resources soliciting and obtaining needed resources

Formalization constitution developed, registered, recognised by outside actors

Management of Resources finance, people, activities, administration

Movement from the center outward represents progression from a *bit* to *some* to a *lot* of capacity in that area

BDHF
CHCs

Enable underserved communities to nominate and organize CHWs

This objective has been met within the tribal areas and the black freehold areas. CHWs were nominated through PLAs and CHCs are playing a role in managing the CHWs. The freehold areas were given priority, as they had been under-served by the previous dispensation, for they fell between homeland and white-serving systems. On white-owned farms, however, this objective has not been met. This is a more recent engagement, and it has taken time to get co-operation from the white farming community. CHWs working with farm workers in these areas are based in neighboring tribal areas, and farm workers have not had the same opportunities for participation and have no real access to management structures. Strategies for their meaningful participation will be more difficult to develop.

Facilitate integration of community resources with DOH infrastructure and programs

There is good integration of community resources with the DOH through the CHCs and the BDHF, and especially through the CHWs. The BDHF in particular has played an important role in acquiring land for health stations.

Effect genuine community involvement within a community development approach

The first question is, what is meant by “genuine”? There has most certainly been a high level of involvement by community members in BDCSP activities. The use of participatory approaches for communication, research and education, and the CHW nomination process, along with the presence and work of the CHWs, has led to people being well-informed and certainly consulted and involved to a significant degree. If “genuine” participation is defined as influ-

encing project management decisions and project direction through being part of analysis and decisionmaking, then there is room to grow in the follow-on project. Regarding employing a "development approach", it is true the BDCSP has links with the Bergville District Development Forum (BDDF) and has sought linkages with broader development actors and initiatives.

Learning with communities

There has clearly been a great deal of learning going on, by and with community members. The participatory education and research styles enable this.

Be transparent and accountable

It was apparent to the evaluation team that the project is committed to working this way. Structures are in place and report-backs take place. However, capacity needs to be further built at community management level in order for them to truly hold project management accountable. They also need to develop their ability to challenge and question.

Maximising use of local people, resources, and appropriate technology

This has taken place in staffing, in use of existing structures and facilities.



Strategies that led to success

Regular discussion has taken place where people can express their views, ideas and concerns. There is mutual listening, and outcomes and plans are negotiated. This has taken place in various ways during the BDCSP.

Evaluation Team considering community participation issues in the BDCSP

- PLAs, Health Days, feedback meetings and workshops, training, and focus groups,
- Evaluations and other exercises involving reflection and listening have taken place regularly in the BDCSP. Often this is done with outside help to enrich the analysis and re-planning.
- Structures have been used or created to provide a framework for capacity-building and practical support.
- The project has worked constructively and strategically within the DOH transformation processes, which has enabled integration of resources.
- There has been ample training and capacity-building for community members, community structures, CHWs, CSP staff and DOH staff. There have been many kinds of training, cross-visits and outside consultants have been used effectively for input and mentoring.
- CHWs have become a key linking, integrating component. Incentives are needed to enable them to keep working.

- Networking – the active building of relationships, seeking collaborative working arrangements and synergy

Key constraints

- There is limited organizational capacity in CHCs and the BDHF. While this will take time to grow, there is still a lack of coherent objectives, strategies and indicators for working in this area of institution-building. This has led to some neglect of this area.
- Lack of a clearly articulated development approach in which the BDCSP interventions are situated. The BDCSP could work with its partners and stakeholders to help them understand various approaches to development.
- The legacy of apartheid is visible in the attitudes of some white farmers and in the lack of structures, or access to structures, for farm workers, and in some of the sensitivities and constraints to developing these. There is not yet a strategy from the BDCSP to address this. In the areas where we interviewed people, it seemed there may be problems in expanding CHW services to workers on white-owned farms, which comprise 10% of the district. A simple extension of the same model will not work, especially if developmental and partnership objectives are important.
- There is growing concern about CHC members' desire for payment. This is not now a constraint, but may prove a threat in future if not addressed now. There may be a number of dimensions to this. There is rising unemployment in South Africa right now, accompanied by strong feelings of entitlement. It may be that CHCs see themselves as CSP structures, set up by the CSP to manage "their" CHWs, and this is a project that has money. The manner in which the CHCs were established may have contributed to this. We feel it will be important to further explore the underlying aspects of this, and what the implications are for the future. This can then inform strategies to address the demands.

Recommendations

- The next phase of the BDCSP has significant capacity-building aspects. It should be preceded by a process of clarifying or developing a coherent statement of the community development approach. From this, a set of approaches to organization-building should be developed to enable true partnership with communities. Set out indicators, dedicate capacity for the work in the appropriate places, and set out a realistic time-frame. Organization-building is a long-term process, and solid foundations are worth building. In the short-term, the BDHF should be assisted to formally register with the Department of Welfare.
- The discontent among CHCs about payment should be unpacked and used to inform the strategy. The project should consider whether it is always necessary to set up a special CHC, or whether existing structures can be used, thus working with what exists—as the CSP has done in so much of its work. There tends to be a multiplicity of structures within communities, often with highly overlapping membership. Many become dysfunctional, but are seldom disbanded. The possibility of using focus groups as a building block—although slowly and organically—in community organizing could be explored.
- The farm worker context should be reconsidered in light of the development approach and community partnership ideals. The strategies will certainly need to be refined for specific situations, and the very different contexts should be reflected in plans and expectations of achievements. The experience to date will help inform strategies and plans.

People we spoke with

Members of the BDHF focus group discussion

Mr Nxumalo
Mr Mazibuko
Mrs E Khumalo
Mrs J Mdluli
Mrs M Hlongwane
Mrs G Nada
Mr T Ndlovu
Miss P T Lubhede

BDHF member interview

Mr Xala – of Thuthukani

White farmers interview

Mr and Mrs Shepherd
Three women workers (very briefly, in farmers' presence)

Landowners from the freehold areas focus group

Ms G Ndaba
Mr C Mabizela
Mrs P Cebekhulu
Mr O Dladla

Moyeni Health Committee, CHW focus group

Mr SE Mabizela
Nana Zwana
Thoko Dlalisa
Mrs B Makumbuthi
Nomhlango Ntlapo
Lena Dlamini
Winnie Jwara CHW
Winnie Mabaso CHW

Accompanying other teams, interviews

Sigodiphola – Mobile point 15 mothers, 2 CHWs
Okhombe 8 women
Busingatha Clinic Sr Mlangeni 2 CHWs
Dukuza Clinic 6 mothers staff Mrs Mayvis
Ndaba Sr K Matshanda, Sr E Madondo, S Ndebele
Dukuza home visit Mrs Mabizela CHW Rose Nkosi
Emmaus Hospital Mrs Koloko Mrs M Maloi
Traditional healer Yalekile Mabizela (MaGam-bushe)
CSP staff interviews
Monika Holst, Mrs Dube (together)
Motivators Zanele Mchunu, Lucky Magwaza
CHW focus group
Mrs N Ndaba Mrs B Mlotshwa Mrs Bmkonza
Mrs N Mlangeni
Mrs J Hlongwane
Mrs F Nzimande
Mrs B Ndlovu
CHF interview
Mrs P Zondo
Mrs T Mtshali

Information systems

Data Sources for Evaluation Process

Interviews Conducted Health Forum (8 members), ISDS Facilitator, CS Project Manager, Community Facilitators, Community Health Workers, Area Managers (2), District Information Officer, Resource Center Manager, mothers from the community, Emmaus Hospital Management Team, Professional Nurses at mobile clinic and fixed clinic, physicians at the hospital, private practitioners, District Health Management Team

Visits Made Health Day, mobile clinics, Oliviershoek Clinic, Dukuza Clinic, Mazazini Clinic, Emmaus Hospital, Resource Center, CSP Office, private practitioner's office

Documents Reviewed District Information Report, January - June 1999, "Rapid Appraisal of the Clinic Tick Register in Okhahlamba-Emtshezi Health District" by Stephen Knight, CSP reports – quarterlies and annuals, CSP Third Annual Report, CSP Mid-term Evaluation, "Guidelines on Implementing a Health Management Information System in the Uthukela Region of KZN", Presentation by B Gaede, "District Information System Development in Okhahlamba-Emtshezi District", Clinic Tick Register, Guidelines for the District Health Information Systems by A Heywood

Project Goals and Objectives

Program Component #2 "Establish a health information system which will gather data and information, process it for the community and the DOH in order for them to understand and respond to health problems and issues in the District, and link into the provincial and national information systems"

The goal of establishing a DHIS to gather data for use by the community and DOH is well on the way to being achieved. While the information system took major strides in the community component, it lagged behind in the facilities and is just now reaching the hospital. Additional follow-up is needed particularly within the facilities and hospital to ensure that data become information. The project has served as a catalyst in creating a culture of seeking out information to better target and guide decisions related to service delivery as well as health education messages. A wealth of special studies have been conducted over the life of the project, including valuable information gained through PLA exercises.

The goal for DHIS development was appropriate, as the health structure was still gathering data but not using it to manage the health system. The flow of data/information is still very fragmented and still needs major restructuring. The district has built relationships to ensure that the DHIS learning and best practices are shared with the province. The district is described as "the leader in HIS formation, development, and implementation" for the province. The BDCSP has supported three reviews of the DHIS development with recommendations providing guidance for the way forward. The first two were completed by Dr. A. Heywood from the University of the Western Cape, well known in South Africa for his work in the area of informatics. The third was conducted by Dr. Stephen Knight, who serves with the Department of Community Health at the University of Natal. The review focused on the HIS tools being used.

Continuous input is being provided by the Project Director and ISDS to ensure that the information system becomes integrated and is used at every level, particularly by those who gather it—that is, the providers of preventative and curative care in the district.

Process by which goals and objectives have been achieved

The BDCSP requirement to track indicators raised the awareness that basic indicators of the health of the community were missing. The initial baseline KPC survey provided an opportunity for the participants, who were mainly health workers from the district, to be introduced to indicators, population-based data, and how to use information to guide program decisions. The indicators in the KPC were tied to key project objectives, which would need to be met in the course of the following four years. Interest grew in establishing better indicators which could provide useful information for monitoring health services.

As an initial step in DHIS reformation, a situational analysis of the district's collection and use of information was supported by the project with a consultant from CHES. Several recommendations were made, including the appointment of a district information officer (DIO) along with a change in the flow and use of information in order to achieve the decentralization of the information. The consultant's work was viewed as a research project, and although recommendations were appropriate, the process was not "owned" locally and had limited impact. When the district health team appointed someone to work alongside the consultant, the process moved further.

An important activity at the mid-term evaluation was a one-day exercise, where a flow-chart was constructed by the district and project personnel showing the flow of information in the district. This helped set out the design of a DHIS.

The process was then stimulated by the time and effort put in by the Project Director/District Medical Officer to develop a clinic tick register (CTR) based on indicators the district staff decided were important. Ideas and suggestions came from the work being done with information systems in the Eastern Cape. As the register was being developed, the Provincial Informatics Unit was continuously asked for feedback, as well as a minimum set of indicators required by the province. This engagement led the province to begin a process of refining their own collection tool, with input from DIOs. With the district's appointment of a full time interim post for a DIO and a request for the ISDS facilitator to provide guidance and mentoring, many positive results are forthcoming.

A District Information Team has been established with the objective to lead the development and revision of the information system. The team is headed by the ISDS facilitator in co-ordination with the DIO.

A vision for the DHIS has been established as follows: **"To develop a flexible District Information System that is able to deliver accurate, current and integrated information and constant feedback to all levels and sectors, enabling decisionmaking for quality of care"**. The district has also recently appointed information officers at the following sites: clinic facilities, mobile clinic teams, school health team and hospital. The DIO will conduct a meeting with these officers on October 13, 1999 to discuss skills/tools and training needs. The goal is for each information officer to collect and analyze data for their units on their own, including facilitating the local team to interpret and use the data.

The chief professional nurse appointed to the DIO interim post received training in information systems. The DIO's training was done by the ISDS facilitator and focused on linking information to goals and indicators, data analysis and validation, only collecting what can be used, interpreting and using data, etc. (The national guidelines for establishing an HIS by A. Heywood served as a reference source). She is managing the data well and has circulated an extensive information report with design graphics for the 6-month period from January to June, 1999. The DIO is currently circulating an information report every month, with plans to also circulate a quarterly report. She has been receiving feedback on the report and is making adjustments accordingly. The DIO has discussed the data report with the BDHF, Area Managers, DHMT, and hospital team, and has plans to present data findings to the local government.

The district has set 46 indicators with a corresponding daily tick register. The register was developed from the Eastern Cape model. The indicators, which were reviewed and modified with health providers' input, are mainly facility-based and related to service provision. The District Medical Officer also wrote guidelines for the development and use of the DHIS and training was provided to the facility and mobile clinic staff on use of the CTR. A discussion of the use and flow of information being collected with the CTR follows later.

A summary of how the district is developing their DHIS is as follows:

HIS Recommended Process

- 1 Identify the purpose of the service
- 2 Develop indicators which will track achievement towards that purpose
- 3 Identify data items which will measure those indicators
- 4 Design system with feedback and flow of information
- 5 Design/choose tools
- 6 Identify skill needs at different levels

Partners

There are many partners involved in the development of the DHIS including:

- Provincial Informatics Unit
- Queenstown District of the Eastern Cape
- CHES/Center for Health and Social Services/University of Natal
- KwaZulu-Natal Health Informatics Section
- University of Western Cape Health Information System Project
- Initiative for Sub-District Support of the Health Systems Trust (ISDS)
- PHC staff (clinics and hospital)

These are all organizations or units which are working within their regions to develop useful information systems. The involvement of many partners in the process has enabled the DHIS development and implementation to influence the Informatics Unit both provincially and nationally, as well as enabled the district to benefit from the "latest thinking" and experiences related to HIS. The district, through the DIO and ISDS facilitator, is providing input and representation on the development of the provincial tick register currently being developed by the province.

Community Component

A data collection system was established with the support of the project to monitor the CHW interventions at the community level. Indicators include aspects of monitoring nutrition, such as percent of children growing and or faltering. The CHWs have used information from health cards to ensure that children have received all the necessary vaccines according to their age. The CHFs did an excellent job discussing the information collected and necessary actions both with the CHWs, the local mobile and clinic facilities, and with the community during health feedback days. The CHWs also have begun collecting information regarding under-five deaths. This information is being shared with the clinics and communities, but not consistently with the DIO. Additional tools are needed to improve the data collected in relation to deaths. This mortality registration could lead the way to strengthening the mortality reporting and analysis with the district health system as a whole.

Special Studies

Complementing the DHIS, many special studies have been conducted to follow up on issues revealed by KPC surveys, clinic records regarding attendance and disease profile, PLA exercises, etc. The KPC process demonstrated how information could be collected and then used for program design. The district provided training in conducting focus groups, PLAs, and small research initiatives. The individuals receiving the training were then given the opportunity to gather information where gaps existed, and with guidance, make applications to ongoing interventions. The district also invited graduate students from both within and outside the country to come, collect, and present information related to areas of interest to the district. Students came from Liverpool School of Tropical Medicine, Emory University, University of Natal, etc.

Special studies included

- KPC survey/baseline and final,
- nutrition survey with anthropometric measurements,
- HIV/AIDS intervention outcome study, evaluation of the HIS,
- evaluation of the Clinic Tick Register,
- health worker motivation study,
- vaccine drop-out rate study,
- focus groups regarding exclusive and continued breastfeeding,
- focus groups on diarrhea management practices,
- multiple PLAs regarding child health practices,
- HIV/AIDS women's risk study,
- opportunities for microenterprise development in the district, etc

CHFs and Area Managers readily provided examples of how these special studies have resulted in changes in how they complete their work particularly in the way and to whom they provide health education.

Information Flow

The system that existed in the district was different to that of the province, resulting in double-reporting as forms were not compatible. Many vertical systems were in operation in the district with various reporting requirements. The development of the DHIS during the project period has, for the most part, addressed the duplication and information flow. However, there are some remaining health components which still need to be integrated into the DHIS including environmental health, which currently send its information directly to the region and province, private sector practitioners, who have no link to the district system, and the CHW information which is not included in the DHIS report.

The information from the DHIS is currently facility-based information. Management data, including financial and human resources information, is not integrated into the DHIS, limiting access to information needed for decisionmaking.

Information is submitted monthly. For facilities and mobile clinics, it currently bypasses their supervisor (Area Manager) as this step was causing a further delay in reaching the DIO. The Area Managers (supervisors) are not satisfied with this set-up and a meeting is scheduled to review the decision made. Following is a brief summary of how data are flowing through the various components of the district health system.

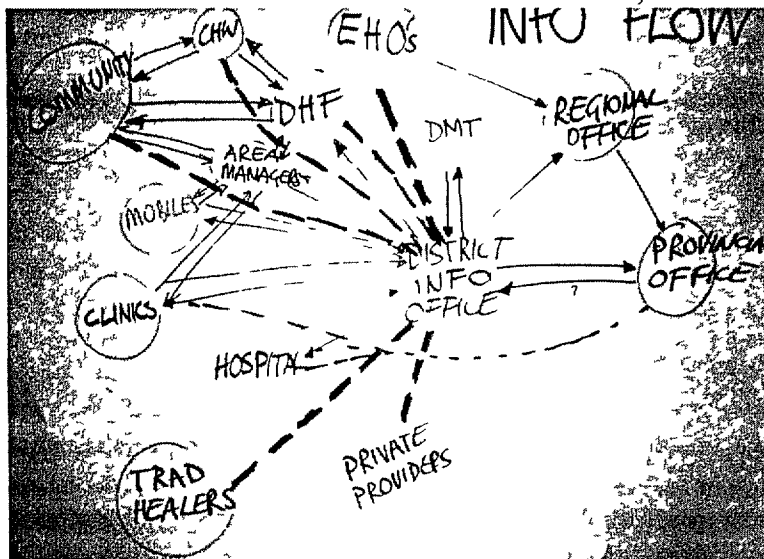
- Community information – Collected by CHWs daily, and cumulated and submitted monthly with the assistance of the CHF. The data flows as far as the Area manager but only inconsistently to the DIO. Referral forms from community to clinic are being com-

pleted, with both the CHWs and the clinic sisters completing the form upon referral and discharge

- **Facility** – Data are collected on a daily basis with the Clinic Tick Register and summarized and submitted on a monthly basis. It flows from the facility to the DIO, bypassing the Area Manager. Regarding referrals to the hospital, the clinics provide minimal information on referral forms and no feedback from the hospital is provided.
- **Mobile teams** – Data are collected on a daily basis and summarized on a monthly basis. This team spends the most time working with data – up to one day per week, four days per month. They have difficulty working with the clinic tick register—due to its length, it is difficult to complete quickly. The team collects the data on one form and then at the end of the day, transfers the information to the clinic register. The repetition of data entry is a time-consuming process. The new provincial register, which will be released soon, is shorter and simpler.
- **Hospital** – Routine data collection does occur, but no internal reporting information mechanisms are established. The data collected is passed on to the DIO on a monthly basis. The only information available is that provided through the DIO. No case fatality rate data is available. In addition, it is recommended that the outpatient clinic at the hospital use the same register as the clinics use.
- **School teams** – These report on a monthly basis. There is considerable doubt about the usefulness of the information collected. The school health information is currently undergoing review by the provincial “health promoting schools” program.
- **Private Practitioners** – Physicians send referral letters with patients, but no feedback is received from the hospital upon discharge. The patient carrier cards do serve as a source of information and help rectify the feedback problem. Data from general practitioners are not submitted to the DIO. Some practitioners submit reports on communicable diseases, while others just refer patients with these diseases to the public sector clinics. There is no exchange of information between the DIO and traditional healers.

Information Use

While data is being collected at all levels, its interpretation and use remain inconsistent and undeveloped. The support provided by the ISDS to the DIO and district at large has provided a neutral arena for honest feedback with little risk, and an opportunity and support for change.



Information flow diagramed by the evaluation team

Observations of data use at each level are below

Community Team CHFs and CHWs with their Area Managers are beginning to use data for decisions. They review nutrition data and infant and child deaths on a monthly basis; the data are then presented to communities biannually during “health days”, and monthly to the clinics by the CHF. Information on child deaths needs to be improved, however, as only “family diagnoses” are done, rather than “verbal autopsies”. The questionnaire used in Northern Province for

collection of death data at the community level should be considered for use. It is interesting to note that approximately 75% of the infant and child deaths occur at home.

Mobile Team Mobile teams say they discuss the data among themselves twice a week, but little information is being used to change practices or make decisions. The mobile teams present their data to the community biannually, and also share the information with CHWs for TB follow-up, defaulters, etc. They say their supervisors do not discuss the data with them.

School Team The team and their supervisor readily admit the data is not useful, as does the DIO. None of the data being collected by the team are being used. It is hoped that the "health promoting schools" program will develop indicators and tools that will help guide the services for the schools. The district should give input to this process if possible.

Fixed Clinics One out of three of the clinics reported that they review their data twice weekly. Their explanation of how data are interpreted and used for redirecting clinic services was not evident. Clinics report that their Area Managers do not discuss the data with them. As the position of information officer at the clinic is established, it must be ensured that the officer has regular dialogue with the clinic workers regarding interpretation and use of the data.

Hospital Data are being collected but there is no evidence of its use. The new report from the DIO has stimulated interest in using information at the hospital, and provided motivation for the review and establishment of relevant indicators. No perinatal, morbidity or mortality audits are currently being done. The only analysis of data at the hospital occurs through the DIO.

District Health Management Team Since the release of the first DIO report, the DHMT has placed greater emphasis on information-based decisionmaking. For example, discrepancies were found between mobile services and the figures in the DHIS report. The DHMT is conducting a review to find the reason for the discrepancy and take appropriate action.

The DHMT also lacks integrated information for making decisions. For example, to fully understand and evaluate the quality of care, information regarding finances and human resources will also need to be integrated. The DIO has made an excellent start with the reports produced to-date, and by engaging the many stakeholders of the information. The DIO has plans to also engage local government about the health indicators being measured.

KPC Survey This data has played a major role in both the design of the project, as well as providing direction to the DHS. In many ways, the KPC survey served as the "mother" of information collection and use in the Bergville subdistrict.

Resource Center and District Newsletter

In support of the district becoming a "Living University", a resource center was established. The center includes a large number of manuals, newsletters, district documents, and special studies related to primary health care. The center is well-organized, with references catalogued according to subject. The center is primarily supported by a local consultant and does not yet have someone from within the district system responsible for its operations. It is currently located in the Bergville District Office, but there has been some thought about moving additional resource centers to the facilities themselves. The center has limited resources at the moment, and lacks computer equipment for Internet access and still needs additional technical books and videos. Those coming to complete special studies in the district have used the center the most. Nurses have also come in or have called the manager for information. To ensure the future of the resource center, the district team needs to appoint someone to guide the development of the center and to discuss with district health staff what they would like the center to be.

The resource center has also been producing and widely circulating a newsletter three to four times a year. Each newsletter has a theme, depending on current trends in the district health system. Past newsletters have focused on HIV/AIDS, IMCI, formation of the DHS, etc. The most recent newsletter from August, 1999, covered issues related to monitoring and evaluation. The newsletter is a good mix of technical updates and related achievements and ac-

tivities within the district. District health staff say they read the newsletter and find it helpful and interesting and would like to see it continue. The newsletter is also circulated to private practitioners in the area and many NGO partners in the province.

Lessons Learned / Best Practices

The District did an excellent job of documenting lessons learned as the information system was undergoing development, and as training in its use and evaluation of its usefulness took place. Following are some of the documented lessons learned:

- To start with data and try to make sense of it is fundamentally flawed. If you don't know what you are looking for, you won't find it.
- District information systems need to be indicator-driven. In this way, only essential information is collected rather than a pile of data that only causes confusion. In other words, *Define indicators before you decide on data items*. Do not collect any data items that are not being used in indicators.
- If you keep the HIS tool simple, training needs will be minimal.
- Quality Assurance training deepened the appreciation of the importance of data for assessing and improving quality.
- While outsiders can provide information, skills development, and facilitation, the DHIS should be developed within the service. There must be a critical mass of interest for any development to make a start and survive.
- Flow of information needs to be congruent with the decisionmaking process within the district, i.e., if someone needs to make a decision about a service, this person needs to have access to information to make the decision. Therefore, the HIS should be congruent with the organizational purpose and design. If it still does not flow, perhaps there is a problem with the organizational design.
 - Flow of information should be clarified within the district and the provincial departments to avoid duplication of efforts and inefficiencies.
 - The information flow must include feedback to the gatherers of information, the clinician, CHWs, clerks, etc.
 - Information systems reflect the bias of the organization – what (and how) one measures shows what is valued and important.
 - Information systems influence the way staff perform their duties. The design of a tool, the bias reflected in the information system, and getting feedback on what they are doing influences their practices.

“What you measure, you become ”

Application of Lessons Learned

The efforts of the district and project staff and ISDS facilitator in developing key relationships and joint activities with multiple partners for the development of the DHIS is to be commended. The process used to inform and advocate about DHIS development will contribute to its sustainability and provide many opportunities for scaling up within the nation. Many avenues were created for sharing lessons learned with a larger health audience. Some of the avenues are as follows:

- Through representation by the ISDS facilitator and DIO, the district participates actively in the development and functioning of the Provincial Health Informatics Forum, where best practices regarding DHIS are shared, opportunities for training made available, and

feedback on provincial policies and tools is provided. The forum includes all 25 DIOs in KwaZulu-Natal Province.

- The Project Director and ISDS facilitator have had continuous dialogue about the implementation of the DHIS with the Provincial Informatics Unit Director as well as with other NGOs involved in HIS development. The strongest partnership exists with CHES. Another strategic partnership exists with ESATI (Eastern Seaboard Association of Tertiary Institutions). ESATI conducts the winter and summer schools that provide training for health practitioners in the province. The ISDS facilitator, along with CHES, co-design and teach the courses about information systems. The majority of information officers in the province attend these courses. The ISDS facilitator has also enabled the Health Systems Trust to focus an edition of their newsletter on best practices for HIS development and implementation based on the Bergville sub-district experience. The newsletter is circulated to all health institutions nationally.
- Numerous cross-visits have been hosted by the district for neighboring districts and other provinces coming to learn about HIS development. The district has also hosted a significant number of visitors from outside the country.
- The district can be described as a national learning site.

Final Recommendations

- Develop a simpler Clinic Tick Register (CTR). Both the ISDS facilitator and DIO are in the provincial group providing input on the revised, simplified register to be released by the end of the year. The district must ensure they have the time, logistics, feedback and input needed for their participation. This register will hopefully decrease the amount of time teams (such as the mobile clinics) spend on gathering and organizing their information.
- The district information team, in collaboration with the service providers and community, should revisit district and facility indicators to assess their usefulness for performance monitoring.
- While data collection is occurring at all levels, its interpretation and use remains undeveloped. The district should increase the use of qualitative data to complement and validate quantitative data, thus allowing the community to provide input. The use of PLAs and special focus groups should be continued to better define community practices, resources and influences on child and maternal health. Area Managers should be encouraged to conduct quarterly meetings with their team leaders and include feedback on information as part of their supervision support visits. The DIO should continue to be supported by the ISDS facilitator to mentor information officers on the interpretation and use of information.
- Community information should be integrated into DHIS and feedback to the community strengthened. For a start the project should obtain the tool from Northern Province for "verbal autopsy" at the community level. The DIO and ISDS facilitator should work with Area Managers and CHFs to link CHW information to the DIS. This could also be used as an opportunity to explore avenues, tools, and resources to improve district mortality reporting as a whole.
- Efforts should be made to improve linkages between the BDHF and the district health structure. The BDHF should not just receive information, but should also be given the opportunity to provide feedback on quality of services.
- The project should consider how to include private practitioners and traditional healers in the DHIS, training events or special meetings when there are common objectives or vision.
- The project should review the usefulness of including data from the environmental health team in the DHIS.

- Ensure school team data collection/information are properly reviewed and adjustments made. If possible, provide input to the development of the new indicators/register for school health
- The ISDS must continue to support and mentor the DIO to obtain feedback on the report layout and use, and make adjustments accordingly
- Determine the resource center's role in making the district a "Living University". If priority is given to further develop the center, appoint someone from within the district to manage and guide the development of the center

Team Members

Bernard Gaede-ISDS Facilitator, Noel Phillips-Provincial MCH Manager, Deli Mtshali-DOH, S Maphalala DOH Area Manager, Stephen Knight-Community Department Health, University of Natal, A Henderson-Technical Advisor, World Vision US

Individuals Interviewed

A special thanks to all those who gave their time and insights to the evaluation team including mothers, CHWs, Community Facilitators, Area Managers, Clinic Sisters, Mobile Team, School Team, Hospital staff and management, District staff and management and finally to the Child Survival Team and Management. The excellent opportunity to be a part of the evaluation and the fine hospitality is very much appreciated.

Team responsibilities

The team focused on immunization (EPI—Expanded Program on Immunization), Acute Respiratory Infection (ARI), nutrition, Control of Diarrheal Disease (CDD), and on progress towards implementing the Integrated Management of Childhood Illness (IMCI) approach



An evaluation team conducting a field visit

Methodology

The team divided into two groups, one focusing on EPI and ARI, and the other on nutrition and CDD. Each team reviewed literature on project objectives relating to these interventions. The documents reviewed included the Detailed Implementation

Plan (DIP), Knowledge, Practice and Coverage (KPC)

Survey results, Mid-term Evaluation Report and Annual Reports of the BDCSP

The field visits included visits to five facilities, six villages, two mobile points and a village health day. Focus group discussions were held with mothers, caretakers and the BDHF. Interviews were held with clinic staff, doctors, a traditional healer, CHFs, CHWs, Area Manager, CHCs, the BDCSP Manager and the DHMT.

The team assessed the following during the field visits: knowledge and skills of the facility-based health worker, health facility supports, record keeping, referral systems, client satisfaction, linkages between the household, CHWs, health facilities, BDCSP and the DOH, including interfaces with traditional leaders, healers and private practitioners, attitudes of all role players, planning/management of CHWs activities, and supervision.

The team also carried out a review of the CHWs' record sheets and Children-at-Risk Registers.

Project goal and intervention-specific objectives

Goal

The aim of the BDCSP is to reduce maternal, infant and child morbidity and mortality by improving the technical and management capacity of the KZN DOH and the BDHF to deliver effective child survival interventions.

Intervention objectives and achievements

EPI

- i 90% of children (12-23months) will receive DPT1
- ii 80% of children (12-23months) will receive OPV3
- iii 90% of children (12-23months) will receive measles vaccine
- iv 20% reduction in the number of children (12-23 months) who defaulted between DPT1 and DPT3 doses
- v Establish 10 sentinel surveillance sites to track vaccine-preventable diseases with emphasis on measles and polio

The first four objectives were measured through the KPC and results showed that all were surpassed. National targets have also been set for objectives relating to OPV3 and measles. Though the national target for measles is higher than that set by the project, the KPC showed that in Bergville District these targets have also been achieved. No sentinel sites were established, since subsequent to the DIP, a notification system was put into place for all service delivery sites, making sentinel sites unnecessary.

Control of Diarrheal Diseases

- i 80% of children (0-23 months) with diarrhea in the past two weeks will receive the same amount or more breast milk
- ii 80% children (0-23 months) with diarrhea in the past two weeks will receive the same amount or more fluids
- iii 50% children (0-23 months) with diarrhea in the past two weeks will receive the same amount or more food
- iv 75% of mothers will know that a child recovering from diarrhea should have an extra nutritious meal per day

None of the objectives were attained (iv was not measured). Although the 1996 levels of mothers maintaining or increasing levels of breast milk or food during episodes of diarrhea were maintained, there was a drop from 60% in 1996 to 55% in 1999 in the number of children who received the same amount or more fluids. Because of the sample size and methods used, it should not be assumed that the difference between these two figures is significant.

Nutrition, Growth Monitoring and Promotion

- i 65% of children (0-3 months) will be exclusively breastfed
- ii 75% of children (20-23 months) will be breastfed and given solids/semi-solids
- iii 80% of children (0-23 months) in the district will have been growth monitored in the last 3 months
- iv 80% of growth faltering or underweight children will be treated according to the protocol

The first two objectives were not attained according to the KPC. However, the number of exclusively breastfed 0-3 month babies rose from 37% to 48%. The number of children (0-23 months) who have been growth monitored also rose from 5% in 1996 (there were 84% weighed but not monitored) to 91% monitored in 1999. The indicator changed in 1999 from number of children who had their growth monitored in the last three months to having their growth monitored in the last two months.

The last objective was measured through the review of records and registers of the CHWs and CHF's. A preliminary analysis shows that once children are placed on the at-risk register, they are followed up for two consecutive months until they are growing well again. However, it does appear that at-risk children are not being put on the at-risk register in a consistent manner. This is an area that needs further attention.

Control of ARI

- i 85% of mothers of children (0-23 months) who experience rapid or difficult breathing 2 weeks prior to the survey will have sought medical treatment
- ii 50% of mothers of children (0-23 months) will know 2 or more referral signs for pneumonia

Objective one was essentially met as there was an increase from 78% to 84% of the number of mothers seeking medical treatment for children under 2 years with cough or rapid breathing. There has been modification in the danger signs for referral with the transition to IMCI, and the

terminology has thus changed. However, using the old terminology of dyspnea, the second objective has been attained (54%).

In the KPC survey mothers were asked questions about the management of childhood illness. The KPC survey showed, however, that grandmothers are often responsible for caring for the children, CHWs therefore targeted this group.

Process by which the objectives were achieved

The assessment focused on

- i facility-based health workers' performance and training,
- ii systems and support structures,
- iii CHWs' performance and community perceptions, and
- iv linkages and partnerships

Facility based health worker training and performance

Approach and methods used The goal of the project initially was to have 6 technical trainers (one for each intervention) who in turn would train the 12 doctors and 40 nurses working with the DOH and in the private sector of Bergville.

There are 34 professional nurses and 9 doctors in the Bergville catchment area. Of these, 6 have recently been trained on IMCI, 2 of whom have received IMCI supervision training and 30 ARI training. Eighty percent of professional nurses have had ARI training. Two technical trainers received training in Malawi on pneumonia care assessment.

All health facilities were provided with CDD case management charts, but there was no formal training received in CDD. The technical trainers have promoted the establishment of ORT corners in clinics with limited success.

Plans were made to provide additional training in nutrition to health facility staff, but were not implemented.

Findings

- Of the facility-based health workers visited, it appeared that the health workers who had received IMCI or ARI training managed the child better than those who had not been trained. The attitudes and motivation of the facility-based health workers varied, and better attitudes were observed in nurses who had recently received IMCI and PHC training. Stock control was also good in these clinics.
- ARI, CDD and/or IMCI guidelines were seen in the majority of clinics visited, although it is questionable whether they were consistently used. For example, in one case the guidelines were behind a drug cabinet. In another clinic, guidelines were displayed in the labor ward.
- Progress is being made at the hospital towards implementing the ten steps of treatment of severe malnutrition. Milk-based feeds are now available, which mothers feed to the children. There is also an increase in the awareness at this level about the importance of nutrition in the treatment of malnutrition.
- In terms of the assessment of the client, responsibilities and tasks are segmented and there seems to be a lack of integration of preventive and promotive services.
- Health messages given in some of the facilities were often not in line with the messages given by the CHWs. In other cases, health messages by CHWs were not reinforced by the health facility, which led to doubt among some mothers on the validity of these messages.
- In some clinics the plotting and interpretation of growth curves was inadequate.
- A support supervisory system has begun, and there seemed to be a difference in performance among the nurses that were supervised. The inadequate support supervision is mainly

attributed to the lack of trained supervisors and a definite supervision plan for the district. Existing supervisors are too busy with other activities. There are plans to train more supervisors early next year on IMCI.

- The facility staff did not engage in health promotion with the same frequency or enthusiasm as the CHWs. There was a lack of health promotion materials, especially in Zulu, and the majority of posters were in English, produced by the private sector.
- In general, there was neither knowledge of how to track vaccine preventable diseases, nor of how to respond to an outbreak. Not all facility-based health workers know which forms to use and what samples to collect. However, one professional nurse from the mobile clinic initiated a response based on the information she had received, and after alerting the district system, vaccinated for measles on her own initiative.
- Clinic sisters who are complying with the new standard guidelines for ARI are meeting with resistance from some clients, who are unhappy that they no longer receive cough syrup. Before, when they paid for services, they received the medicine and say they prefer this. There is lack of communication and counseling regarding this change.
- The records at one facility revealed inappropriate use of drugs.
- All exit interviews showed that caretakers were satisfied with the services. However, in focus group discussions some mothers complained of rudeness and abusive behavior among the nursing sisters.
- The project seems to have concentrated more on the community side of health services. The management capacity and in-service training of professionals at facilities, especially the hospital, is perceived to have lagged behind.

Constraints

- The training planned for CDD and ARI was interrupted due to the transition from vertical programs to the integrated approach of IMCI. This is largely due to the limited human resources available to continue training and supervision while in the transition. A deliberate decision to phase out training on vertical programs was also made.
- There is no one responsible for the regular in-service training of facility-based health workers.
- Health messages delivered at the facility level and through CHWs are not consistent with one another.

Systems and Support structures

Findings

- There were sufficient drugs at the clinics, though BCG is presently not available in South Africa.
- Appropriate equipment was in place and all facilities visited were well maintained.
- In some clinics where training had been recently received, the statistics, which are being provided monthly by the DIO, are appreciated and are being used at clinic level. In the same clinics, statistics were being calculated based on their own records and used for planning health education. The tick register is being used and monthly summary sheets are completed. However, the completeness of the tick sheet is questionable, as is the usefulness of the information for monitoring IMCI. In some cases, this information is not being used. Some facility-based health workers felt the information from the DIO does not reflect the situation as it truly is, nor does it have indicators that management can use. There are no statistics displayed on the walls.

- The facility staff did not express any concerns about client waiting times or about workload
- CHF's and Area Managers offer support to CHWs regularly. The CHF's accompanied CHWs on 10 to 12 home visits per month. Monthly report meetings were held where information



was collected and the register filled in. Problems were raised and CHF's were called in on special occasions to assist CHWs and CHCs. The CHF's helped with problem-solving, weighing and illness-specific messages.

- Area Managers were very busy, but were said to be available. There are no regular meetings with Area Managers and CHF's. There is, however, a monthly meeting of all BDCSP

staff and the CHF's report to the BDCSP office every morning.

- Community and facility health staff did not really distinguish between district and project management, which reflects the intentional integration of the BDCSP with the DHS.
- There are problems with delays in the arrival of ambulances. In one case, a child with severe pneumonia was asked to go to the receiving hospital by taxi. At clinics without 24-hour services, patients who have been admitted during the day have to be moved to another facility after hours. Private transport is sometimes needed for cases requiring medical attention after hours.

Constraints

- CHF's complained of lack of transport. They would like to be thanked for the work that they are doing as CHF's and not to be lumped together with motivators and/or DOH. They also walk long distances and this limits the number of visits they can make.
- There is inadequate support supervision for facility-based health workers.

Community Health Worker (CHWs) performance and community perceptions

Approach and methods used

Since the beginning of the BDCSP, the CHW program has expanded. Fifty-one of the current 66 CHWs are supported financially by the project, as is one CHF. The DOH pays the remainder. There is a total of 66 CHWs, 4 CHF's and 2 Area Managers. Before the project began, there had been only 16 CHWs in the Bergville area. Recently DOH has committed itself to cover CHW salaries and to even increase their pay.

The community selected the CHWs, using PLA methodology. Criteria for selection of CHWs were developed and the CHCs were then involved in the selection process, using the criteria. Selection of three out of the four CHF's was done by the DOH.

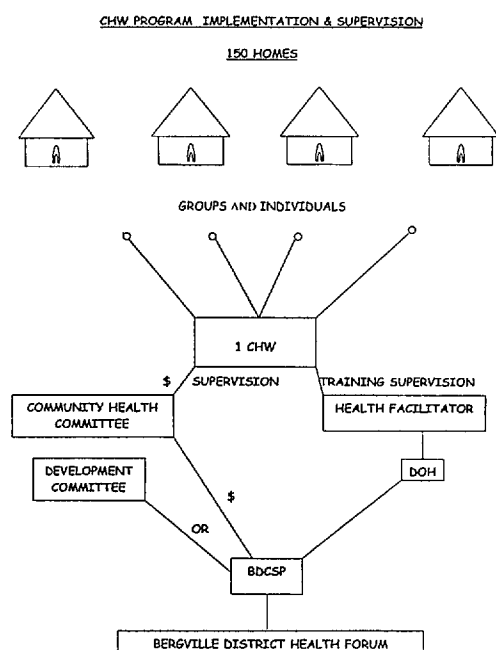
There has been comprehensive training for all 66 CHWs. This training covered such topics as an overview of the child survival project and the conceptual framework on malnutrition. More emphasis is now being placed on the use of available home based fluids and sugar/salt solution (SSS).

The training program for the CHWs built on and consolidated work done in other areas in KwaZulu-Natal. Training was done one week per month for six months on a modular basis. External facilitators, using a hands-on approach, trained six trainers. After three joint training sessions, whereby the external trainers trained the local trainers, the new trainers commenced conducting training themselves. Subsequent training was based on the needs of the group, and therefore training advanced at different rates with different groups. The content of the training puts equal emphasis on technical and counseling skills. Participatory techniques were used.

On completion of training, the CHWs received a TALC scale and a copy of the Zulu Facts for Life book. During the course of implementation, the DOH produced a flipchart which they use for nutrition education. They also have a register for the results of growth monitoring for each child.

An assessment form for the CHWs has been developed for CHF, and based on the results of these assessments, certificates for the CHWs were issued. These assessment forms were subsequently used by the CHF as a tool for monitoring and supervising the CHWs.

A working model of community structures has been established. This includes the CHW reporting to CHCs, which in turn report to the BDHF. The CHWs and the CHCs are represented on the BDHF. The CHCs' responsibilities include the supervision of the CHWs. In terms of grievances or complaints, the CSP reports to the CHC responsible for the supervision of the CHWs concerned, and the committee takes disciplinary action. CHF's have trained all of the CHCs. However, not all committees have equal understanding of their roles and responsibilities, and are consequently functioning at different levels. Furthermore, although these structures are respected, they have no real authority or control.



CHWs support the facility or the mobile clinic in their community once a week. The CHWs should refer at-risk children to facilities. At Emmaus Hospital, children are referred from the pediatric ward to the CHF. The CHF refers the child to the CHWs and then reports back to the pediatric ward at the hospital on progress and follow-up made. The CHWs carry out home visits to all homes with children under 2 years. Where there are a large number of homes with children under 2, the visits are prioritized based on the health status of the children in the households.

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Findings

- Community members have unanimously endorsed the activities of the CHWs. Repeatedly, the CHW program has been named as one of the positive changes in the health system. It was also felt that the CHW program contributed to shorter queues at facilities, thus giving the clinic nurses more time for seeing clients. The positive attitudes and ease of communication of the CHW were mentioned as their best qualities. The advice of the CHWs spurred appropriate care-seeking behavior, and communities said they were happier now, knowing when to go to the clinic, and when and how to treat their children at home. The perceived

decline in the mortality and morbidity of the children in the area was often attributed to the CHWs. Throughout the interviews, community members repeatedly requested that CHWs take on additional duties. These duties included care for the elderly, the disabled, and those with AIDS.

- The CHWs are highly motivated, and have strong technical and counseling skills.
- There seems to be a general acceptance of CHWs by all levels of medical personnel. There does not seem to be any conflict between these two cadres, as is often found elsewhere. It was found that the default-rate for TB has gone down, which was attributed to the CHWs, as they help with DOTS follow-up. There are also fewer severely sick children in the district now, which was attributed to improved knowledge among caregivers about timely referral.
- Mothers understand the growth curve better and link it to the health of their children.
- Older community members felt the younger CHWs might not be accepted by the community. Problems were addressed through the CHC and BDHF.
- CHWs are generally accepted at clinics and hospitals. Most problems occurred where the sister-in-charge of the clinic was not on the CHC. Although the clinic staff appreciated their services, one of the clinics said they would like them to come every day, because they helped to fill out the registers.

Constraints

Currently there is reliance on external support, especially for the CHF. The concept of ownership of the CHW program needs to be stressed.

Linkages and partnerships

Process

- Efforts are being made to connect meaningfully with the other elements of the health system. This has intensified as the project has progressed and has served to develop a more comprehensive approach to health care.
- Concerted efforts were made to strengthen links between the CHWs and the DOH, mainly by the CHWs helping in the clinics with growth monitoring promotion.
- Transformational Leadership training, which occurred in the last year of the project, has been a unifying element in bringing the various components of the health system together. An example is the establishment of the Nutritional Task Team to look at all elements of nutrition.
- The project is currently involved in developing the community component of IMCI and partnerships have been forged with UNICEF and Smith-Kline Beecham.

Findings

- Although there are official communication channels between the BDCSP and DHMT, informal channels are more often used.
- A true partnership between BDCSP and DOH can be seen during training, where BDCSP provided refreshments, meals, videos and other equipment, and the DOH agreed to release staff for training. The nurses who were interviewed expressed appreciation for the training they received.

Constraint

Private practitioners have been oriented on the BDCSP and on ARI protocols. However, there is little involvement of traditional healers, and the role of private practitioners needs to be expanded. Lessons learned from Estcourt and Ladysmith could be valuable here.

Lessons learned

- In the KPC protocols, it is the mother who is questioned regarding knowledge and practice with respect to CDD and not the caregiver. As grandmothers are now taking care of many more children, the survey should measure the knowledge and practice of the “caregiver”. The results of the KPC survey may not reflect actual household knowledge and practices.
- One of the successes of any CDD program is the perceived reduction in the number and severity of diarrhea and malnutrition cases seen at health facilities or admitted to hospitals. However, cases of severe diarrhea are not currently recorded at the hospital, nor are the number of admissions. It may be best to have an indicator based on the number of admissions and develop an information system that supports this. This would also be a means by which hospitals can be integrated in to the delivery of PHC services.
- One of the strengths of the training program for CHWs has been the emphasis placed on the mentoring of trainers.
- Field supervision is a key element in the motivation and performance of all levels of staff. The commitment of CHWs and a motivated community is key to the success of the project. The commitment and quality of external trainers and project staff played an important role in its success.
- Partnerships between the DOH and NGOs are vital for the delivery of a comprehensive health service.

Application of lessons learned

- Because of the perceived value of the CHWs, the DOH was influenced to consider support for the CHW program in the province.
- The training approach for CHWs was considered for the community component of IMCI, and as a result, IMCI training was started in Bergville.
- Based on the training of the CHWs in Bergville, provincial DOH nutritionists have joined the district health workers for a 6-month training program in growth monitoring and promotion. Other districts have subsequently trained CHWs on voluntary basis.

Final recommendations

Health worker performance and training

- Improvements are needed in knowledge, skills, interpersonal communication and counseling skills of health facility staff.
- Support supervision should be strengthened.
- Use the current DHIS to strengthen the use of information at each level for management and decisionmaking. Integration of the community-based information with health facility information is needed.

System and support structures

- Strengthen and use the formal mechanisms for communication between DHMT and the BDCSP.

CHW performance and community perceptions

- There is a need to address the emerging problem of HIV/AIDS and orphans at the community level. However, CHWs should not be over-extended.
- Strengthen the philosophy of ownership and support of community-based health programs in the community.

Linkages and partnerships

- Involve private practitioners in the project
- Ensure consistency of messages at all levels and from all sectors

Members of the evaluation team and sites visited

Team leader Dr Kenya-Mugisha UNICEF, ESARO
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Dr Larry Casazza, WVUS,
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Fiona Ross, U of Natal, Nutrition
Bruce Margot, Provincial DOH
Dr Steve Knight, U of Natal
Dr Tim Kerry, IMCI trainer, Okhahlamba/Emtshezi District
TR Xaba, Area Manager,
Chris Gibson, CHWs Nutrition Trainer
JB Ntuli, District PHC Trainer

Assisted by
May Hlongwane, Community Health Facilitator
Gaby Mazibuko, Area Manager
Thoko Hlongwa, DIO, Ladysmith district

Field visits
Health facilities visited
Emmaus hospital,
Dukuza,
Oliviershoek,
Ebusingatha, and
Mazizini

Mobile points visited
Stulwane, and
Reserve C

Villages visited
Mazizini,
Ebusingatha,
Dukuza,
Oliviershoek,
Emmaus,
Stulwane

Village health day attended
Mamfetheni B

Special thanks to all individuals interviewed at community and facilities, the clinic health committees and the Bergville District Health Forum

HIV/AIDS

Data collection

The team visited several locations and individuals, although no structured interviews were done. The September 1999 evaluation of the school peer-education project and the Anti-AIDS clubs in was also used.

Original project goals and objectives

The goals were threefold

Objective HIV1

80% of teenagers (10-19 years) exposed to the program will know 3 modes of transmission, 3 methods of preventing HIV transmission, and 3 implications of early sexual involvement

It is difficult to accurately measure this goal because it was modified over time, a baseline was not done, and this particular goal was not specifically measured. However, the evaluation of the peer education program by McKay (1999) suggests that the average primary and high school student in the district (whether peer educators or non-peer educators) has a good theoretical knowledge of three modes of transmission, 3 methods of prevention, and 3 implications of early sexual involvement.



HIV evaluation group in discussion

The average trained peer-helper scored over 80% of questions right in the areas of basic knowledge about HIV, HIV transmission, and prevention. In all these areas, trained peer-helpers knew significantly more than their peers who were not exposed to the peer education program.

Six groups of peer educators (109 pupils) were trained and 7 groups (119 pupils) are still in training. Twenty Anti-AIDS clubs were formed and 26 are in the process of formation. The number of children in each group ranges from 10-39.

Outputs

A Six sexuality education motivators trained in HIV/AIDS and life skills education

- This goal was achieved, with nine sexuality motivators trained

B Teachers and Parenting groups trained

- Seventy-three teachers (52 primary and 21 high school) were trained in life skills education, including sexuality education. Most of these teachers are using the skills they gained from this training.
- No parenting groups were trained.

C Health education materials and curriculum developed

- New material was not developed, but material was adapted from a wide range of sources including the DOE, DOH, Planned Parenthood Association of South Africa (PPASA), and from other countries such as Malawi.

- D Condom distribution points (for example, in *shebeens*) chosen and supplied with condoms, and social marketing possibilities explored
- This sub-goal was not fully realized. At most, some trained teachers report they distribute condoms at their schools, and CHWs and peer motivators distribute condoms as part of their responsibilities

Objective HIV 2

90% of Health Care Providers including Traditional Healers will know at least 3 modes of transmission, 3 methods of preventing HIV transmission, and 3 implications of early sexual involvement

Output

- A Training of DOH, private practitioners and traditional healers in universal precautions and HIV support and counseling
- A 3-day course was arranged but not well-attended by traditional healers. No further efforts have been initiated. At least one traditional healer is distributing condoms as a result of the influence of the BDCSP, is using a fresh blade during traditional scarification practices, and is referring very ill patients to the hospital
 - Some efforts were made to coordinate with the health service staff in the area but without any success. No efforts were made to contact the private practitioners

Objective HIV3

90% of teachers taking part in training course will be competent to teach methods of HIV transmission and prevention and the proper use of condoms

Teachers trained and providing sexuality education to their students in their various schools

- Seventy-three teachers were trained, and all those surveyed (McKay 1999) were providing some form of education. Forty-two primary schools were covered (52 teachers trained), and 13 high schools (21 teachers trained)
- Fifty-eight percent (58%) of teachers indicated they were confident in their ability to teach correct condom use and 41% admitted uncertainty (McKay 1999)

Other findings

HIV/AIDS Motivators As mentioned earlier, the motivators were well trained for this job. When they joined BDCSP they only had their high school diplomas, but the training equipped them to train teachers on sexuality and life skills education.

All schools were covered with training in sexuality and life skills, but not all schools had trained peer educator groups. Reasons why not all schools had peer educator groups included the following:

- Some school principals were not receptive at the initial stages of the BDCSP, which delayed the process
- The motivators' schedule clashed with other school activities, such as extra-mural activities, meetings of the Department of Education (DOE), and the teachers' in-service training

Peer Educators The training of peer educators was successful and the peer educators are quite active. The motivators recommended the following for the future:

- Peer education should be strengthened and peer educators should be supported

- Church and out-of-school youth should be targeted by motivators
- The code of conduct for the motivators should be discussed before the motivators start working, to clarify any issues that could later cause problems
- Relationship between the motivators and the CSP management should be relaxed, so that the motivators can be able to discuss their personal problems with the management

Health Services The team visited Emmaus Hospital and Dukuza Clinic. The findings were as follows

Attitudes The services are still not adolescent-friendly. Some nurses feel it is their responsibility to scold and reprimand the youth when they come for family planning services or treatment for STIs.

Support for the counselors The HIV/AIDS counselor at one facility was emotionally exhausted, as she had just finished counseling a very young man. Her supervisor didn't understand why she was always depressed after counseling, and thought she was just moody. It is very important that counselors have support and people they can always talk to when they are emotionally exhausted. All nurses need to be trained in counseling.

Circumcision A number of young men go to the hospital for circumcision, believing that circumcision "prevents" STIs and HIV. The hospital now requires an HIV test from everyone coming for circumcision, with the idea that this might prevent unnecessary exposure to HIV for the surgical staff. When the young men hear about this, they prefer not to take an HIV test and therefore not to be circumcised.

Willingness to coordinate with the Department of Education Nurses interviewed showed willingness to work with the DOE, e.g. when invited to give health education in schools. A nurse at the hospital said she would be willing to spend one morning per week giving health education in schools.

Traditional healers BDCSP's initial attempts to get together with the traditional healers were unsuccessful. The traditional healers showed willingness to work with BDCSP and suggested that BDCSP start with a small group of traditional healers. They felt the others would follow when they saw the progress they were making. One traditional healer always gets condoms from the BDCSP offices.

Church leaders The church leader that was interviewed fully supports the work of the BDCSP, but suggested that BDCSP should not only focus on the youth but also the community. He specifically said parents need to learn some parenting and communication skills to enable them to talk to their children about sexual issues. He also suggested that church structures should be involved, as most of the church leaders do not support or do not want to involve themselves with HIV/AIDS issues.

Community Health Workers HIV/AIDS messages were included in the training of CHWs, and they give messages to the families of the children under-2 they visit. They only give these messages if they see someone ill and with AIDS symptoms. They have not yet come across anyone who has "come out of the closet." The CHWs get condoms from either BDCSP or clinics and distribute them to the community.

Schools Two schools—one high school and one primary school—were visited. At the primary school, the teachers said they fully support the work of the project. They mentioned that the motivators have helped them with skills to talk about sexual issues with children. They said it was not easy at first, but with their help they now talk easily. They also reported that in 1997

they had 4 pregnancies in the schools, and every year before then they had pregnancies, but since the anti-AIDS clubs were formed there have not been any pregnancies (1998 and 1999) The clubs convey HIV/AIDS messages through drama, songs and poems

At the high school there are peer educators who target their schoolmates and out-of-school-youth. One problem peer educators mentioned is the *amaqhikiza* who live in their areas and force them to have sex with their partners. The parents also encourage them to fall in love, as they themselves fell in love when they were young.

Unfortunately these are not in line with the messages they are supposed to give to their peers.

Private practitioners Two private practitioners were interviewed. One doctor who had been in Bergville for the past 2 months did not know anything about BDCSP, although he is just across the street from the BDCSP offices. This doctor does not use the syndromic approach when treating STIs, as he has never been exposed to this method of treatment. Even the doctor who has been in the area for a number of years does not know what BDCSP actually does. Neither doctor has condoms at his office, so they refer their clients to the clinic or pharmacy for condoms. The doctors are willing to work with BDCSP, but said it's difficult for them to attend meetings during the day.

Comments of appropriateness of original objective

It is the opinion of this team, given the difficulty of translating knowledge into behavior change, that the first goal was not appropriate. Rather than aiming for theoretical knowledge only, future efforts should have objectives for behavior change such as reduced pregnancies, condom collection, and visits to clinics.

The original teen program was adapted from a whole schools program, where motivators were simply giving messages themselves to all the classes. In the current peer education program, motivators train small groups who in turn teach their peers. This was implemented at the beginning of 1998 after a team visit to Malawi.

Findings of the team

Strengths of Program

- Most principals and teachers are supportive, and the trained teachers are generally active.
- BDCSP motivators are well trained, even beyond specific aims of the program.
- BDCSP motivators stuck to the program targets, e.g. monthly school visits.
- There are reports of individual behavioral changes in schools, e.g. reduced number of pregnancies at Souko High School and Crowfield Primary School.
- The program had very broad participation at times, e.g. involving local DOH, parents, teachers, community members, and other schools.
- Trained peer educators are active in taking classes in sexuality education, drama, music etc. AntiAIDS Club members present high quality Anti-AIDS messages and appear enthusiastic and willing to continue these programs.
- Sustainability was a consideration of the program, e.g. committees representing various schools in an area have been charged with sustaining programs.
- Emmaus Hospital staff seem willing to cooperate with local school staff to do health education if approached.

Constraints

- Some principals are not supportive
- Some trained teachers were ridiculed by their peers
- Some trained teachers were not active
- The physical education program at times clashed with school activities, e g sports commitments
- Motivators sometimes have difficulty living up to their own messages
- Transport difficulties (motivators have to share vehicles with the CHFs)
- Strikes by teachers disrupted activities

Lessons Learned

- Programs should be co-designed with target populations using shared values, rather than imposing methods on them
- Conditions of the motivators' contracts, regarding for example, child birth, should have been more clearly stipulated and negotiated at the beginning of the program
- Objectives for the HIV /AIDS intervention should be linked to behavior change, because knowledge alone does not always lead to behavior change

Recommendations for the School Program

- 1 Instruments and strategies are needed to help us better understand behavior change in at-risk populations, e g the area around Sbuko High School, and what role the traditional practice of *ukuqoma* plays in the sexual behavior of young girls
- 2 Special attention should be given to supporting and training young women in prevention For example, during condom education, young women should be taught how to make condoms more appealing to their partners Secondly, more effort should be given to make female condoms more accessible
- 3 Condom education should be far more practical and thorough Rather than merely talking about condom usage, peer educators should be given opportunities to practice on condom models
- 4 More effort needs to be directed at involving locally consumed media and magazines in establishing new norms of sexual behavior among young people
- 5 Young people should be given a chance to develop projects that address their own needs, and adults should only give their support and encouragement
- 6 Community participation/involvement should happen at all levels of the program to ensure ownership
- 7 Service providers at the health facilities should be encouraged to continue to be as adolescent-friendly as possible Moralizing should be discouraged as much as possible
- 8 All those involved in sexuality education should be mobilized, for example, church groups and parents Those who are reluctant to talk about AIDS, such as certain church groups, might find a relevant role in certain tasks such as assisting their members to communicate with their children in matters of sexuality
- 9 Building capacity within the DOH is necessary for the next phase of the program Training of additional CHWs and HIV/AIDS communicators (HACS) should be explored
- 10 Teachers of peer educators should be supported and empowered in their tasks by follow-up meetings, a newsletter, and contact with other teachers and members of allied disciplines, such as DOH school liaison teams

- 11 Enlist the help of People Living With HIV/AIDS (PWAs), as most people won't change their behavior until they actually meet someone with AIDS
- 12 Efforts should be made to strengthen the relationship between private practitioners and BDCSP. For example, the DOH and the BDCSP could supply private practitioners with free condoms and information about the Syndromic Management Protocol. Technical meetings on topics such as the syndromic approach should be held at the times convenient for the private practitioners to attend.
- 13 Hospital- and clinic-based counselors should be informed of the location of other counselors. If counselors were connected in this way it might serve to support them and assist in appropriate referrals. Counselors need mentoring and support from supervisors.

Members of the team

Dele Mtshali, DOH	BS Dube, CSP
Collin McKay, Consultant	Elsie Mbhele, DOH
Nellie Makhaye-Gqwaru, USAID/South Africa	

People interviewed

Dr Bhika, Dr Kubheka, Rev, Rod Smith, Sr Koloko, Regina Mthembu, Nesta Ngubane, Ms Zuma, Masabatha, Sr Matshanda, Mrs Ndaba, CSP motivators, Mr Zuma, Ms Mtshali, Ms Hlatshwayo, Ms Masondo, Mrs Mazibuko, Mrs Masengemu, Mrs Maphalala, Mrs Madinani

Maternal Health

Methods

Data was gathered mainly through group interviews during visits to various levels of services and community groups. Collection of the data was structured according to the Maternal Integrated Pathway.

- Level 1 Home deliveries – a group of women who have assisted women to deliver at home, and a group of mothers who delivered at home were interviewed
- Level 2 Mobile Clinic – the Professional Nurse in charge of a mobile team was interviewed at a clinic point. Clients at the point were also interviewed
- Level 3 Day Clinic – a day clinic (open 8 hours a day) was visited and the Professional Nurse interviewed
- Level 4 Community Health Center – 24 hour deliveries. The team of Professional Nurses working at the clinic were interviewed
- Level 5 Community Hospital – the medical superintendent, three medical officers and two midwives were interviewed in a group. Patients in the ante-natal and post-natal wards were also interviewed

Project Objectives

- 1 50% mothers will know 2 or more danger signs of ante-natal period which require consult with a professional
- 2 85% mothers will have 3 or more ante-natal visits
- 3 Strengthen referral systems in outlying areas by establishing 4 rural health/community meeting centers
- 4 Two midwives from each clinic/hospital will be trained in the management of obstetric emergencies
- 5 Increase to 80% those women with children (0-23 months) who do not want another child in the next two years or are not sure, who are using a modern method of contraception
- 6 Train and mobilize facility and community-based health care workers for improved management of low birth weight babies and post-partum complications. This will be measured by clinic site visits

Findings

The objectives were limited in extent, and on their own would have difficulty meeting the stated goal of the project. For this reason the team decided to endorse the Maternity Integrated Pathway currently being developed in this district. The above-mentioned objectives will be incorporated into this plan.

- 28% of deliveries occur at home, which has not changed between KPC surveys. When interviewed, women preferred facility delivery to deliveries at home. Without

exception, the women interviewed who delivered at home had received antenatal care. The high immunization coverage achieved suggests that women do bring their child back to the facility following home delivery.

- Women were unhappy with delivery provisions at Dukuza clinic, which provides maternity services only until 1600hrs
- Mobile clinics are providing regular antenatal services, although there is some difficulty with laboratory services. Since the mid-term evaluation, there has been much better co-operation between mobile clinics and the CHWs
- Perinatal mortality is a major problem, yet there is no monitoring or use of perinatal mortality data to improve services
- Referral protocols were prepared and distributed to clinics by the BDCSP, however, it is not certain how much they are being used. Referral procedures do not appear to be working well, with communication problems from the hospital back to the facility
- Although advanced midwives have been trained for Emmaus hospital, none are currently providing maternity services
- Communication is generally available, and the new health stations will have radio units. However, even when an ambulance is called, delays of up to 4 hours are experienced
- Although Emmaus hospital collects the relevant information about maternity services, this is not collated or analyzed in depth

Recommendations

Maternal Health Team

A fully representative maternal health team for the district must be formed. It is suggested that there be representation from

- Community
- Community Health Facilitators
- Mobile teams
- Clinics
- Community health centers
- Hospital

The team should be co-ordinated by a district advanced midwife, supported by an interested medical doctor. The team must have credibility and be accepted by all. The role of the team will be to

- Plan maternal health services
- Monitor the quality of the services
- Run and document perinatal mortality meetings
- Report to District Health Management team monthly
- Ensure health facilities are suitably equipped
- Resolve transport problems

Home deliveries

We recommend that institutional deliveries be encouraged. For those women who have to deliver at home we recommend that

- First aid delivery skills be developed at community level through the network of women's and other groups
- A system of "housekeepers" be developed in the community, to take care of the children and household chores of delivering women so they can go to a facility to give birth CHWs might help here
- Births occurring at home should be fully documented and form part of the DHS Somehow this information needs to be captured by the information system

Mobile Clinics

- Mobile clinic services should be supported and given in-service training by an advanced midwife
- The service should continue as an integral part of the district health service, but its role needs further study
- The logistics of laboratory services must be improved
- The referral system and follow-up must be improved
- Staff from the mobile service must attend perinatal mortality meetings

Health Stations

This is an excellent concept and the stations should be opened without delay It is recommended that a telephone or radio be available 24 hours a day



Evaluation team members considering preliminary findings

Clinics

Maternity services should be offered 24 hours a day, or not at all It is recommended that

- One clinic be upgraded to offer a 24-hour service in the next 12 months, as a pilot
- A mothers' waiting area be provided at the pilot clinic
- Ensure 24-hour, reliable telephone service
- Ensure reliable transport – plan this with the community
- Common management and referral protocols to be used in all services in the district
- Display maternal health information in health facilities
- Provide in-service training regularly to all practitioners – "PEP for ALL in 2000"
- Maternal health services should be supervised by an advanced midwife, weekly
- Personnel must attend sub-district perinatal mortality meetings, monthly
- Personnel must submit accurate statistics and information, including comments on client satisfaction and satisfaction
- Antenatal care must be provided at all services

Community Health Centre

The community health center is functioning well, but we recommend it be developed into a referral facility for the nearby clinics They need to

- Appoint at least four advanced midwives

- Provide a waiting area for mothers awaiting delivery
- Update protocols
- Attend perinatal mortality meetings at the community hospital
- Receive regular supervision and in-service education
- Develop a policy on termination of pregnancy (TOP)

Emmaus Hospital

Emmaus is the hospital for the Okhahlamba sub-district and should work with and as a member of the maternal health team

In the hospital

- Provides a primary level service for people near the hospital – ANC and deliveries
- Provides referral service for the sub-district e.g., caesarean sections and complicated deliveries
- Should have one person in-charge of the maternal health service in the hospital
- Should have an advanced midwife in-charge of the maternal health services
- Run perinatal mortality meetings for the sub-district
- Offer PEP training for nurses and doctors at the hospital
- Develop TOP policy
- Provide a waiting area for mothers

In the sub-district

- Provide an advanced midwife to support maternal health services in the sub-district to visit clinics
- Provide in-service training
- Support nurses in clinics and on mobiles
- Improve the logistics of the laboratory support
- Advanced midwife should collect information for the perinatal mortality meeting from sub-district and prepare for the perinatal mortality meeting

Role of the doctors in the hospital

- Support the advanced midwives in caring for and monitoring patients in labor
- Manage complicated deliveries and operative deliveries
- Attend to patients referred by the advanced midwife
- Support the advanced midwife in the support of the clinics

Develop a maternal health information service which can be based on

- The patient carrier card
- Patient's maternity case record
- Labor ward register
- Record of monthly statistics from all health facilities
- Information used in the Perinatal Problem Investigation Program (PPIP)

Final Recommendations

- The province and the BDCSP should encourage the training of advanced midwives and advanced midwifery training facilitators
- A program to support the Maternal Health Plans in the region should be developed and funded, with the following priorities

- Equip practicing advanced midwives to provide PEP training
- Supervise midwives in ante-natal care and labor ward
- Use PPIP software
- Organize and run Perinatal Mortality Meetings (PMM)

Support expansion and further development of CHW program in the region Develop management/supervision skills of first level management, i e , Area Managers

Members of Team

Prof Hugh Philpott	Eastern Seaboard Association for Tertiary Education, CHES
Dr Martin Perez Gonzalez	Medical Officer Emmaus Hospital
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Sr Shabalala
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Annexes

- A Evaluation participants
- B Project structure
- C Shared governance
- D Final KPC Survey Report
- E HIV School Survey Report

Bergville District Child Survival Project

FINAL EVALUATION October 4 - 8 1999

FINAL EVALUATION TEAM

NAME	ORGANISATION
1 Dr G Burnham	Johns Hopkins Univ - USA
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37 Collin Mckay	Education Psychologist
38 B S Dube	DOH B/ville
39 Bruce Margot	DOH/Prov Enviornmental H
40 Thoko Hlongwa	DOH Ladysmith

Project Structure

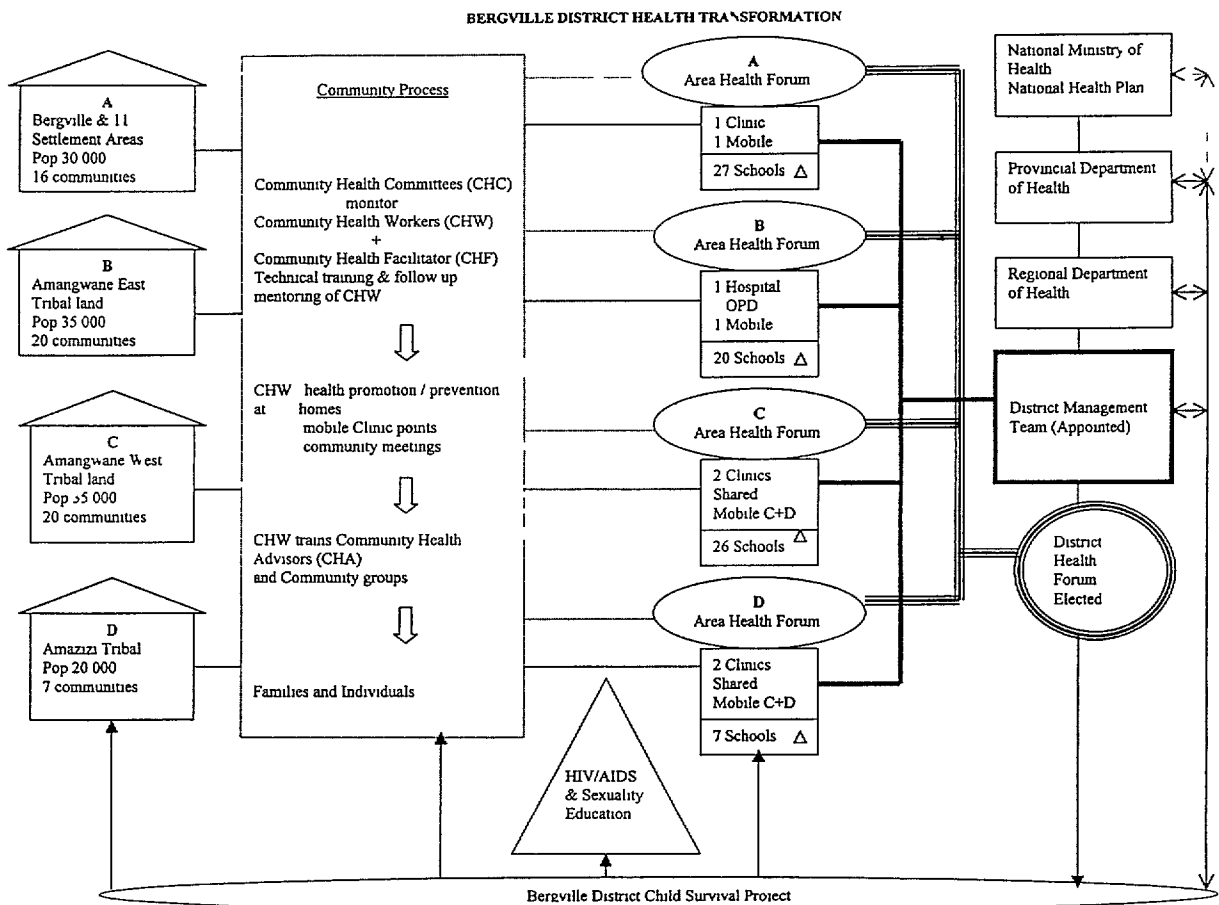


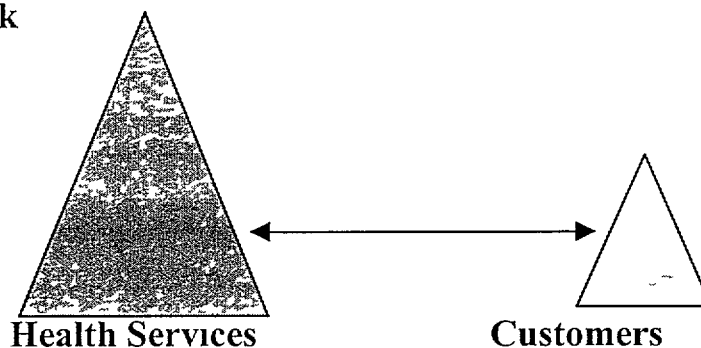
Figure 1

Shared Governance

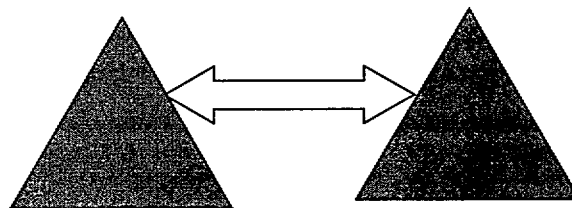
Annex C

- Previous Health Services design hierarchical, command-control
- Last 5 years hierarchy flattened & relationships with the parallel governance hierarchy strengthened
- They remain separate
 - ▣ the customer (individual client and community)
 - ▣ the staff providing clinical and support servicesare not meaningfully involved in decision making in health services

5 years back



Now



- Our current organisational design has outlived its usefulness
- Little delivery on the Provincial Vision of optimal health care for the population
- It is unable to implement the Provincial Mission
- Provincial Core Values like open communication, transparency and consultation, are not served by this design

There is a need for another approach, which is

- client/customer/community focussed
- dynamic and responsive to the changing context
- not hierarchical, and includes managers, clinical and other service providers, as well as the customers of the service, in the planning, monitoring, evaluation and decision-making process

The Shared Governance Methodology/Model is proven in practice to deliver the outcomes we want, is truly new and is the vision being implemented in this District

Vision

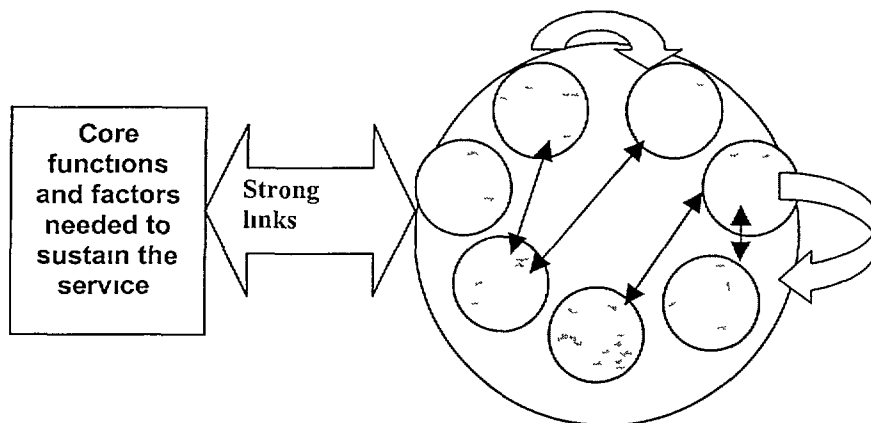
To implement a model (methodology) of shared governance (management and clinical people at all levels, inclusive of client representatives, assessing, planning, implementation and evaluation of services using the balanced scorecard as a feedback tool), which facilitates a dynamic, sustainable, well functioning and integrated health service, providing quality preventative, curative and rehabilitative care, in the Okhahlamba-Emtshezi Health District

Shared Governance and Clinical Governance

- Balances innovation with stability
- Balances the creation of the new and emergent with the optimising of the existing and what is needed to sustain a service
- Is developing, emerging and slow
- There is growth in “chunks”, gradually creating the complexity
- Co-design happens with all stakeholders fully involved
- Control is from the bottom decentralised and local, distributed through the organisation
- Embraces and honours errors as rich areas of learning and development
- Facilitates a free flow of information with feedback loops and is therefore self-regulatory, self-organising and undergoes spontaneous evolution
- Is holistic, affirming that the whole is greater than the sum of the parts
- Proposes no optimum, no “right” way of doing things, but has multiple goals

The emergent design is of interlinked and interdependent governance and clinical councils for key services, programmes and functions
These involve competent management, clinical and client representatives working in a team

Shared Governance and Clinical Governance



Emergent design

Some factors that were important in the progress of this group

1 Distinguish the Leader, Facilitator, Manager and Coach roles

These role are important to distinguish and separate, as was done in this project
The following were the roles

Leader

- ♣ Is responsible for keeping the vision and values alive- through living and being them
- ♣ Taps the knowledge of the whole organisation
- ♣ Reflects and looks for what is missing

Facilitator

- ♣ Manages conversations
- ♣ Does not add judgement or opinion to the group
- ♣ Listens for what conversations are missing and facilitates the appropriate conversation
- ♣ Supports the group in staying focused
- ♣ Is 100% committed to the group achieving *their* intention
- ♣ Keeps the group in momentum
- ♣ Declares breakdowns

Manager

- ♣ Keeps project alive
- ♣ Co-ordinates the overall project
- ♣ Supports the team in being their word
- ♣ Manages the progress and delivery of the project
- ♣ 100% responsible for the team

Coach (this role was missing in this particular project)

- ♣ Responsible for creating a new opening to act
- ♣ Declare breakdowns
- ♣ 100% responsible to the coachee
- ♣ Not to add anything or judge and be honest and up front

2 Meetings around the Five Conversations

The process of the group was to focus on the future though continually being in one of the five conversations described below. The facilitator remained sensitive to which conversation was needed or missing, at that stage, and focused the team on it.

These conversations are

♣ ***Conversation for Possibility***

Exploring the infinite possibilities that are appropriate for attention in relation to the vision of the team. Ideas are generated in a facilitated dialogue. People remain possibility and idea based, throwing off the limitations of the past and allowing the imagination to reach outward towards the future. Evaluations are held to one side.

♣ ***Conversation for Opportunity***

Dealing with how to achieve the possibility. It includes creating specific clear plans, milestones and measurements for moving from the present towards the future possibility. These plans should not be based just on past experience and knowledge but on innovative ways of tracking an idea.

♣ ***Conversation for Relationships***

Relationships are the foundation for everything we achieve. A network of relationships needs to be created and a way of relating to each other in a way that is appropriate to achieving our intentions. We need to ask: Who needs to be involved and how are they going to relate to this project? How will we enrol them?

♣ ***Conversation for Action***

This is to bring about specific results. Actions are determined and commitments are made as promises or requests. The promises and requests are documented and given to each member as their record of their meeting. The teams support each other in being their word.

♣ ***Conversation for Breakdown***

A breakdown is an interruption on the way to achieving a commitment. Usually breakdowns are not openly declared and people see them as a failure and are afraid to admit it. This leads to inaction. However, breakdowns are not bad in themselves and usually throw light on what needs to be done. Declaring a breakdown supports responsibility because it creates an opening to see what is still needed to achieve the commitment.

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AN IMPLEMENTATION EVALUATION OF THE HIV PROJECT OF THE BERGVILLE
DISTRICT CHILD SURVIVAL PROJECT WITH SPECIAL EMPHASIS ON PEER
EDUCATION AND TEACHER TRAINING

Abstract

The present study is an formative evaluation of the HIV component of a Child Survival Program in Bergville South Africa. The evaluation explores two main interventions of the HIV program: Peer Education and Teacher Training.

The findings are that i) there are many strengths to the program, ii) that trained Peer Educators have significantly more knowledge of HIV transmission and prevention than non-Peer Educators, and iii) that most teachers trained by the program are actively engaged in prevention efforts in schools.

Regrettably, the findings also suggest that there is no discernable difference between the at-risk behavior of trained Peer Educators and non-Peer Educators. It is likely that despite many hours of training, Peer Educators still lack basic prevention skills with which to protect themselves against HIV infection.

The implication of the above finding is that unless the program is continued with important modifications, it is most unlikely that the present groups of Peer Educators will have any impact on the spread of HIV in the area.

I. RELEVANT BACKGROUND

1. THE SPREAD OF HIV/AIDS IN KWAZULU-NATAL

At the time of writing, the HIV prevalence among women attending antenatal clinics had risen from 17,04% in 1997 to 22,8% in 1998 (AIDS Analysis Africa Vol 10 No 1 Jun/Jul 1999).

The highest prevalence is in the province of Kwazulu-Natal (KZN) where the rate amongst women attending antenatal clinics is 32,5%. Some of the reasons offered for the high rate of infection in this province have been poverty, westernisation, low condom usage, male promiscuity, the migrant labour system, the breakdown of traditional structures, culturally

beliefs around the submissiveness of women

It has been estimated by the World Health Organization that 60% of all new HIV infections are to young women and girls under the age of 19 (SAFAIDS News Vol 4,1996,p 3) The antenatal results quoted in the previous paragraph showed that the prevalence of HIV infection among young women aged 15-19 rose from 12,7% in 1997 to 21% in 1998

2 ADOLESCENT SEXUALITY

Adolescent sexuality should be considered against the background of the different and uneven rates of physical mental and emotional development which characterize this period It is not uncommon for physical maturity to precede the mental, emotional and social skills necessary to understand and practice safer sex behaviour (Schapink, D, Behavioral Interventions) Other factors which impinge on the sexual behaviour of adolescents may be, the questioning of social norms and attitudes, testing alternate behaviors risk taking identity formation and uncertainty

A sense of self-efficacy and self-esteem (rather than powerlessness and a sense of worthlessness) are considered to be important variables in the sexual decision making of young people (Schapink, D Behavioral Interventions)

Survey data from most countries suggests that the median age at first intercourse is 15-16 years (Schapink D Behavioral Interventions) Recent South African research studies into adolescent sexual behaviour suggest that high numbers of South African adolescents are at risk for HIV infection they are sexually active, do not use condoms and have multiple partners (Nicholas, 1992, Naidoo, Williams, Knight and Bernstein, 1991, Mathews, Kuhn, Metcalf, Joubert and Cameron, 1990, Flisher, Roberts and Blignaut, 1992, Visser, 1995, Ogunbanjo and Henbest, 1998,)

Regarding knowledge about AIDS, research findings suggest that although many adolescents had heard about AIDS many also had serious misconceptions regarding transmission and prevention of the disease In their study of 352 rural Kwandebele high school students (15-19 years) Ogunbanjo and Henbest (1998) found that although 48% of learners had previously received information about AIDS only 5% knew that other sexually transmitted diseases facilitate the spread of the HIV 84% of the study group reported that they were sexually active and two thirds of the study group had had their first sexual encounter by age 16 Only slightly over 25% of the sexually active group indicated that they would use condoms to prevent pregnancy or HIV infection

Visser (1995) investigated the knowledge, attitudes and reported behavioral intentions of 314 secondary school learners with regards to HIV/AIDS The sample was representative of the geographical, racial, urban/rural diversity of South Africa It was found that although learners generally had basic knowledge of HIV/AIDS, many did not see AIDS as a personal threat and many did not understand the transmission of the virus The reported behavioral intentions of the sample suggested that many learners engaged in high risk sexual behavior 23% said they would have sex to prove their love, 11% said they would have sex to improve their self-esteem and 30% said they would spend intimate time with a stranger Overall more boys (44%) than girls (16%) were likely to accept offers of sex which increased the risk of contracting HIV

In a second study Visser (1995) made use of focus groups to explore the knowledge, attitudes and behavioral intentions of a representative sample of 262 students from 15 tertiary institutions in South Africa. While 82% of Afrikaans and 57% of English-speaking students claimed to have no sexual partners, 54% of the African students claimed to have permanent sexual partners and 27% indicated that they had casual sexual relationships.

When the at-risk tertiary students were asked which factors prevented them from eliminating their risk behavior, the following reasons were offered:

- Losing peer group acceptance
- Unwillingness to take responsibility for sexual behavior
- Financial loss – some of the students earned money through sex
- Restriction of sexual pleasure
- Negative attitudes towards condom usage

The above research confirms the relationship between at-risk behavior and the rising rate of HIV infection amongst young people. In-depth research into the reasons for at-risk behavior is helpful in that it provides specific objectives for intervention programmes.

3 CONDOM USAGE IN SOUTH AFRICA

In a large survey of adolescent reproductive health in urban townships in South Africa only 29% of the sexually active sample had ever used a condom (38% of men and 21% of women) (Richter, L. A. A survey of reproductive health issues among urban black youth in South Africa, June 1996 in AIDSCAN)

A 1997 study of men's attitudes to condoms conducted in the Bergville area found that the majority of men would not use condoms. The reasons offered were i) they prevent sexual pleasure, ii) they symbolize mistrust between couples, iii) they violate accepted culture and iv) men were dissuaded from using condoms by the negative reports of other men (Maduma-Butshe, (1997) A Women and HIV Perceptions of risks in a rural community in KZN South Africa)

A study by Evian found that lack of condom use was associated with lack of information, knowledge, experience and familiarity with condoms (Evian, C, et al. Condoms and AIDS Perceptions, attitudes and practices among adolescents and young adults, October 1996 AIDSCAN)

Observations and recommendations arising out of the evaluation of a recent condom program amongst high risk New York adolescents are relevant to the present study.

- Despite previous exposure to education prevention programmes many adolescents still have important misconceptions about safe and unsafe sexual behavior
- Simply demonstrating or verbally presenting information about condom usage is insufficient. As part of their training adolescents need to, for example, physically buy condoms and learn to apply condoms to wooden models
- In many cases male and female adolescents may approach the issue of condom use with different pre-existing attitudes, knowledge, constraints and skills. Presenters should be sensitive to gender differences

- Condom usage might be increased if adolescents became convinced that condom use might increase sexual pleasure. The implication of this for prevention programmes is that males might require skills for convincingly 'marketing' the notion to female sexual partners and females might require skills for applying condoms to male sexual partners in a way which enhances the sexual experience (Murphy, Rotherham-Borus and Reid Journal of Adolescence, 1998, 21)

4 AIDS PREVENTION PROGRAMMES

4.1 CONCEPTUAL AND METHODOLOGICAL ISSUES

Rugg, O'Reilly and Galavotti have argued that AIDS interventions run the risk of being incongruent with their desired outcomes. They have suggested, for example, that interventions aimed at low and high risk populations might have differing outcomes: interventions aimed at low risk groups should include the aim of soliciting the support of these groups in programmes designed to target higher risk groups (AIDS Prevention Evaluation: Conceptual and Methodological Issues 1990 Pergamon Press).

It follows from the above that an intervention aimed at High school teachers or Peer Educators might require some unique outcomes not necessarily shared by an intervention aimed at the at-risk youth with whom these teachers or Peer Educators will be working. With teachers some of the unique intervention outcomes might be: updating teachers about local AIDS prevention resources, equipping the teachers to work within a multi-sectorial AIDS prevention team, communicating effective teaching strategies, individual counseling skills, skills with which to research learners' attitudes and behaviors towards sexuality.

In the same way, if Peer Educators were targeted as part of an AIDS prevention programme the unique objectives of this specific subgroup might be the development of, for example, observation or listening skills in the Peer Educator group because these skills would be important in their subsequent interaction with their peers.

4.2 THEORETICAL MODELS OF AIDS PREVENTION

Health interventions have been informed by various theoretical models. This section will briefly describe five such models, the Health Belief Model, Theory of Reasoned Action, Trans-theoretical Model, Social Cognitive Learning Theory and Psychosocial Theory.

4.2.1 Health Belief Model

The Health Belief Model is underpinned by the premise that when it comes to health issues most people can be relied upon to make rational decisions based on the systematic use of available information (Perkel A. The Mindcape of AIDS 1992 Percept Publishers, Cape Town).

4.2.2 Theory of Reasoned Action

This approach advocated by Fishbein & Ajzen shares with the Health Belief model a belief in a rational basis for health decision making. Supporters also go further and acknowledge that

the perceived importance of the behavior as well as peer pressure also influence decision making (Graeff, 1993)

4.2.3 Transtheoretical Model

This model advocated by Prochaska identifies four discrete stages between unawareness of the need for behavioral change to the stage at which behavior change is maintained (Graeff, 1993). This model is potentially useful in that it invites specific interventions for each stage in the change cycle.

4.2.4 Social Cognitive Learning Theory

This model stresses the triadic relationship between the person's cognitive processes, behavior and the environment. Three variables which exert an influence on behavior choices are i) environment, ii) a person's self-efficacy (belief that they can or cannot perform a certain behavior) and iii) their expectations of the outcome of a certain behavior (Graeff, 1993). Another important variable in behavior is Vicarious Learning: behavior is more likely to be imitated if a respected person is rewarded for the same behavior.

Social Cognitive Learning Theory draws heavily on the principles of behavior analysis developed by Skinner and Watson. This approach to behavior modification emphasizes that behavior cannot be modified until one understands the Antecedents, Consequences and current (baseline) Behavior in considerable detail.

A simple hypothetical application of a behavior analysis to sexual-risk behavior amongst school-goers in Bergville might look like this:

Antecedents (triggers for at-risk behavior) weekend, alcohol, peer pressure,
Consequences Positive consequences for sexual at-risk behavior – pleasure, peer acceptance Negative consequences for sexual at-risk behavior – guilt, anxiety

Based on the above analysis, program planners would seek to neutralize the effect of the behavioral antecedents and the positive consequences for at-risk behavior. Planners would also seek to reinforce new behaviors with consequences pleasing to the clients.

Hypothetical intervention

- schedule prevention messages emphasizing risk, guilt and anxiety for Friday afternoons (beginning of the weekend)
- develop alternative activities for young people on the weekend which provide positive consequences such as pleasure and peer acceptance with no negative consequences such as guilt and anxiety

4.2.5 Psychosocial Theory

This approach is basically a synthesis of Psychoanalytic theory and Social Learning Theory. It acknowledges that sexual risk behavior is influenced by psychosocial factors which are largely irrational. Perkel (1992) in his research found that low Self Concept correlated significantly with number of sexual partners and negative attitude to condom use.

Thus sexual risk behavior is considered to be the product of complex psychosocial dynamics and not only rational processes based on information

The variety of models which have been developed to account for aspects of sexual risk-behavior is further evidence of how complex this phenomenon is. Perhaps the clearest lesson for the designers of prevention programs is to appreciate the heterogeneity which exists within any group of young people: the particular prevention message which appeals to one child might not have the same affect on the next child.

- one child might be persuaded by a rational presentation of the consequences of at-risk behavior
- another child might need her self esteem developed,
- another might require the manipulation of various antecedents and consequences
- a fourth child might dispense with at-risk behavior because the intervention facilitated an improved relationship with her parents or secured a part time job

4.3 AIDS PREVENTION PROGRAMMES ASSUMPTIONS AND SELECTED EXAMPLES

4.3.1 Do AIDS Prevention Programs Work?

Thomas Coates in his review of 23 prevention programs concludes that sexual behavior can be changed. Besides the fact that many sexually active people choose to have safer sex as a result of effective programs it was also shown that many of those who are not sexually active at the time of the program choose to postpone sex until later in their lives (Coates, T, July 1998 Scientific American)

The recent report of the Global HIV/AIDS Epidemic reports that as a result of prevention programs Ugandan men now report one of the developing world's highest rates of condom use for casual sex, 64%. In Senegal condom use exceeds 60% and condom distribution rose from 0.8 million in 1988 to over 7 million in 1997 (Report available on www.unaids.org)

In the same UN report Dr Piot, UNAIDS Executive is quoted as saying

AIDs prevention takes time. But if prevention is sustained and well focused countries can count on success. In the end their efforts will pay off.

4.3.2 Underlying Assumptions

Behind every AIDS prevention program there are likely to be hidden or explicit assumptions. Examples of these assumptions are, whether the program should be i) directive or non directive, ii) aimed at raising awareness or changing behavior, iii) communicating an abstinence or condom message, iv) by means of peer education or through use of outside facilitators, v) uni-faceted or multi-sectorial.

4.3.2.1 Directive or Non Directive

The subject of human sexuality , more than many others, seems to highlight the controversial issue of Freedom of Choice. The question seems to be to what extent individuals should enjoy absolute freedom of choice in matters of sexuality and to what extent choice should be limited by various divine or socially prescribed absolutes. Otherwise stated, to what extent should young people during school based AIDS prevention be actively directed towards 'better' behavioral practices and to what extent should these young people be trusted to choose their own behavioral responses on the basis of available evidence.

4.3.2.2 Aimed at Raising Awareness or Changing Behavior

One of the loudest refrains to emerge from the evaluation of AIDS prevention programs over the past 15 years is that raising awareness and communicating knowledge does not automatically result in behavior change. The section on Adolescence (section 2 above) is clear that programs which communicate basic knowledge about HIV do not significantly change risk behavior. The ingredients of programs which do change behavior are derived from the UNAIDS update and noted in section 4.3.2.3 below.

4.3.2.3 Abstinence or Condom based

Abstinence and condom programs in South Africa need to be viewed against the backdrop of extremely high rates of sexual activity amongst teenagers (see section 2 above) and extremely low condom usage (see section 3 above).

Deciding between whether abstinence or condom promotion messages are most effective in prevention programs is no easy task. A recent UNAIDS review of 53 evaluation studies listed five methodological problems which regularly confound the process of program evaluation. One example of these methodological problems is the tendency to schedule post-test measurements too close to program completion.

(Impact of HIV and Sexual Health Education on the Sexual Behavior of Young People: a Review Update. UNAIDS 1997)

The above review included five abstinence-only programs. The general trend amongst both abstinence and condom programs has been that they either made no measurable difference on the target audience or that they tended to promote more appropriate choices around sexual health. Three studies, one of them an abstinence-only program, appeared as anomalies to the above trends in that they seemed to have negative effects when compared with their program objectives.

Whatley & Trudell (1993) criticized 2 abstinence programs for not being sufficiently comprehensive sexual health programs. Criticisms included

- Insufficient and inaccurate information
- Reliance on scare tactics
- Ignoring the realities of adolescents' lives
- Reinforcing gender stereotypes
- Lack of respect for economic and cultural diversity
- Presenting only one side of controversial issues
- Inadequate evaluation of program outcomes

Otherwise stated, it is possible that the above two programs did not take sufficient cognizance of the heterogeneity and diversity within the target audiences

According to the above UNAIDS review effective abstinence and condom programs all seemed to have the following features in common

- They help to delay first intercourse and protect sexually active youth from STIs and pregnancy
- They start before the onset of sexual activity
- They are gender sensitive to boys and girls i.e. they accommodate gender differences
- They recognize that young people are developmentally heterogeneous and that not all can be reached by the same techniques
- They do not encourage increased sexual activity
- They are grounded in Social Learning Theory
- They give clear statements about behavioral aims and clear information about the risks of unprotected sex and methods to avoid risk
- They focus on activities which address social influences
- They encourage openness in communicating sex
- They equip young people with skills for decoding media messages and their underlying assumptions and ideologies

4.3.2.4 Uni- or Multi sectorial

It is generally acknowledged that AIDs prevention programs should be 'multi sectorial' in order to be effective (see above section). The Kwandebele study quoted earlier is an example of an intensive uni-sectorial educational campaign. Here young people were exposed only to an intensive educational program over a few months without other aspects of their lives being targeted.

At least one of the criticisms of Whatley and Trudell (1993), referred to above, seems to be directed at the fact that the programs were not sufficiently multi-sectorial – the programs were accused of 'ignoring the reality of adolescents' lives'.

A multi-sectorial approach could incorporate initiatives, such as, lifeskills lessons in school time, Peer Education, local youth - friendly health services, media cooperation, local job creation, improved recreational facilities, whole school development, parent co-operation, to name a few.

The Adolescent Health Programme is a collaborative project between the Government and NGO sector in three health districts in the Northern Province of South Africa. The program is multi-sectorial and will make use of Peer Education, development of youth friendly health services, teacher training, media and radio and community groups.

Soul City is an NGO which develops Lifeskills materials for the print and electronic media. The project is comprised of a prime time TV series, daily radio program, booklets on health topics covered in the broadcast media and adult education and youth Lifeskills materials. More recently Soul City has produced print resources aimed at supporting Lifeskills.

education in schools and youth groups. The material is specifically for use by language teachers, Guidance teachers and Peer Educators.

During a recent meeting with representatives of Soul City the writer was told that this organization was actively exploring ways of supporting school based AIDS prevention initiatives in the Bergville area. Soul City is an example of a multi- sectorial resource.

4.4 SCHOOL BASED REPRODUCTIVE HEALTH EDUCATION DIFFICULTIES

A recent publication by the Health Systems Trust has identified a number of problems in the current implementation of school based reproductive health.

- Inappropriate selection of teachers
- Lack of teacher support and follow up training
- Sexuality education given insufficient priority within the school curriculum
- Inappropriate curriculum content overemphasis of the biological content and insufficient integration with social, cultural and emotional aspects of sexuality
- Inadequate resources
- Insufficient sharing of teaching resources which often results in 'reinventing the wheel'
- Lack of supportive inter sectoral integration, for example, health, education, welfare, private, parents etc
- Lack of programmatic evaluation
- Poor linkages with district health systems
- Need for rigorous and innovative research projects which go beyond the level of basic KABP studies

(School Based Reproductive Health Education, 1999 The Health Systems Trust Durban)

The above publication makes a number of suggestions for the improvement of school based reproductive health education. One of those suggestions is for the wider implementation of Peer Education.

5 PEER EDUCATION

5.1 Key Carr Peer Resources

Peer Education (PE) has been defined as a way for ordinary non professional students 'to learn how to care about others and put their training into practice' (Carr, 1987). Based on past research Carr summarizes a number of the potential strengths of Peer Education programs, many of which might apply to school- based AIDS prevention initiatives.

- 1 Through their training PEs are assisted to enhance their own development and psychological growth
- 2 Peer Education is effective because as a strategy it addresses three important concerns of young people, namely, i) loneliness, ii) the need to be genuinely accepted/ understood and iii) the need to secure self identity through interaction with peers
- 3 It is likely that the peer-peer friendship relationship is able to facilitate learning around

subjects which are not easily inaccessible to parents, teachers and even professional counselors

- 4 Because of its effectiveness in bringing about behavior change Peer Education is a potentially useful strategy for prevention programs
- 5 Some young people such as those experiencing learning difficulties appear to be more 'peer orientated' than others. The deliberate formation of Peer relationships aimed at positive behaviors might therefore be of vital importance to certain groups of young people who might otherwise be at risk for acquiring destructive behavior patterns
- 6 The increasing popularity of self help groups such as Alcoholics Anonymous and Weight Watchers has underscored the effectiveness of these groups in maintaining behavior change in their members
- 7 Finally, Peer Education is cost effective for two reasons. Firstly, it is preventative rather than curative and secondly it makes sparing use of professional services

5.2 Port Elizabeth Technikon

Despite the potential advantages of employing Peer Education in prevention programs Carr suggests that the effectiveness of programs depends on the particular model of implementation. Marina de Jager has outlined a number of the key components of the Peer Education program currently in use at the Port Elizabeth Technikon in the Eastern Cape (de Jager, Peer Help)

1 Recruitment and Selection

- Two methods are employed. Students are invited to volunteer to be trained as PEs and lecturers and fellow students are invited to nominate potential PEs
- De Jager is careful to point out that use is made in PE programs of a wide range of students including those who might initially present as 'unfavorable'

2 Training

- Initial training of PEs spans 12-16 one to two hour sessions and is conducted by trainers known to the students, for example, teachers and lecturers. The only contact between the institution and the outside trainers is during the phase when local trainers are trained. A proven syllabus is followed and use is made of the experiential method supplemented with short 'lecturettes'. Particular emphasis is placed throughout on the acquisition of empathic listening skills

The training syllabus is as follows

- Session 1 Orientation, getting acquainted, attending
- Session 2 Awareness of others, non verbal attending
- Session 3 Roadblocks to effective communication
- Session 4 Listening, empathy
- Session 5 Empathic listening (continued)
- Session 6 Empathic listening (continued)
- Session 7 Questioning skills
- Session 8 Self disclosure, I' and you' messages

Session 9 Feedback

Session 10 Values clarification

Session 11 Decision making and problem solving

Session 12 Review, ethics, confidentiality and referral

As can be seen a great deal of emphasis is placed on communication and interpersonal skills

- Besides initial training the model also encompasses the ongoing weekly supervision of PEs after initial training

3 Program Evaluation

- The skill levels and performance of PEs is evaluated by audio and video equipment as well as during follow up sessions
- Self concept and communication skills are measured by psychometric questionnaires and scenario testing (How would you respond if the client) Attitude and behavioral changes in the PE and target populations are evaluated by regular quantitative and qualitative measures
- After their initial training students' achievements are formally recognized by means of certificates

4 Assignments as Peer Educators

With the completion of their initial training students are invited to apply their skills in one or more of five major categories of assignments

- A Group assignment, for example, may be to identify and support a team member looking discouraged after losing a football match
- A typical Outreach assignment would be to pay attention to and respond to cues indicating that another student may be experiencing difficulties, for example, a student crying in the washroom
- A One to one assignment is usually a specific referral to a PE which is regularly reviewed by the trainer for progress
- Working with Junior Primary aged children
- Programs external to the school such as community programs during holidays

5.3 Planned Parenthood Association of South Africa (PPASA)

The Kwa-Zulu Natal (KZN) office of PPASA has developed some innovative ideas around Peer Education. This organization is of the opinion that PE should be a multi-faceted and developmental initiative. Examples include

- Training PEs to identify STDs and provide supportive counseling
- Providing a sequence of grade-linked skills levels for PEs. For example, if a grade 9 child trains as a PE then a more advanced 'PE syllabus' is offered the PE in the following year
- Providing PEs with additional skills in, for example, leadership to further assist them in their personal and career development (Discussion with PPASA Director KZN)

When the above PE programs are compared in detail to the BCSP PE program it becomes obvious that there are substantial differences both in aim and content. These differences will be explored during the Discussion chapter.

6 BACKGROUND TO THE BDCSP HIV PROGRAMME

6.1 Origins

Since the mid 1980s World Vision South Africa (WVSA) has worked closely with local DOH structures to find a community approach to the local problem of child malnutrition. In 1994 USAID awarded WVSA a four year grant to improve the technical and management capacity of the KZN Department of Health (DOH) and the Bergville District Health Forum (Case Study: WV/SA CSXI Bergville Child Survival Project, KZN).

6.2 Projects

Besides the overall aims described above the BCSP is also composed of a number of projects. These are:

- Health services aimed at addressing the major maternal and childhood health problems
- The Community Health Worker Programme which devolves health care and information gathering to the level of individual families
- The development of a more effective Health Information System (HIS)
- The introduction of Sexuality and Lifeskills motivators into schools and communities to prevent the spread of HIV/AIDS

6.3 Aims of the Sexuality and Lifeskills Project

The three main objectives of the HIV/AIDS program, when they were drawn up in 1996, all had knowledge acquisition in common:

1. 80% of teenagers (10-19 years) exposed to the programme will know 3 modes of HIV transmission, three methods of preventing HIV transmission and three implications of early sexual involvement.
2. 90% of health care providers, including traditional healers, will know at least three modes of transmission, three methods of prevention, the correct use of condoms.
3. 90% of teachers trained will be competent to teach methods of HIV transmission and prevention and the proper use of condoms.

The 'planned inputs' (strategies) for achieving the aims of the teenage program (point 1 above) are represented below (BDCS Midterm Evaluation, 1997):

1. Training of additional sexuality education motivators
2. Training of primary and high school teachers

- 3 Training of parenting groups
- 4 Training of men, church and community leaders
- 5 Development of key HIV/AIDS education curriculum for messages on sexuality, relationships and communication (lifeskills curriculum)
- 6 Assessment of need for additional sites for condom distribution and social marketing possibilities

6 4 Strategies for Achieving Objectives

6 4 1 Motivators' Strategies

Since the methods of the school based motivators have been central in the achievement of the project objectives it is worth noting the development of the strategies employed by this group

During 1996 and 1997 the motivators had adopted a 'whole school' approach in the course of a week or two an entire school would be informed about basic HIV/AIDS issues. Motivators addressed individual classes and made presentations at the school assembly.

By mid 1997 it became clear to the supervisor of the team (Mrs Dube) that the 'whole school' approach was more time consuming than originally anticipated. She foresaw that at the present rate fewer schools would be targeted and no time would be available for follow ups. As an alternative to the 'whole schools' approach the team considered using a Peer Education approach. In the course of 1997 the team traveled to a Child Survival Project in Malawi and gained some skills and material in Peer Education. In early 1998, after further collaboration with the DOH, The project adopted Peer Education as its modus operandi in Bergville.

6 4 1 1 Selection and Training of Peer Educators

6 4 1 1 1 High Schools

In high schools the aim of the HIV project was to establish PE groups which were fully representative of the learner group, in terms of grade, gender and population group. After explaining the rationale of Peer Education learners were encouraged to nominate suitable peers for PE training. 'Suitability' usually implied qualities such as willingness to undergo training, concern about AIDS prevention, respectability etc. In most cases the process of nomination was administered by class teachers. If these members accepted nomination then they were required to complete a short questionnaire which assessed knowledge of basic issues around HIV/AIDS for example, existence of the disease, transmission, willingness to assist with prevention. Those learners who achieved 70% for the test were accepted into groups and training was begun. Before training the permission of parents was sought and after training peer educators were recognized at a school assembly to which parents and community members were invited.

The frequency, content and duration of training varied considerably from school to school. Variables were, levels of support from teachers, the extra-curricular commitments of learners, availability of classrooms and busyness of motivators. Training ideally, was scheduled twice a week after school for 3 months (20-24 contact sessions) and was conducted by a male and female motivator. The syllabus varied depending on the needs and interests of trainees but was basically aimed at communicating information about various aspects of infection and transmission of HIV. Regarding prevention, all the motivators decided to include abstinence and condom messages in their training. Training in the use of condoms took the form of discussions or demonstrations at the discretion of the trainer or the interest of the trainees. Demonstrations took the form of displaying condoms or pulling condoms over fingers. At no stage were wooden models used and at no stage during training were the genders separated. Where Lifeskills, such as, assertiveness were introduced it was with the aim of equipping trainees to further prevent themselves from becoming infected. As part of their training, peer educators were encouraged to participate in various forms of group entertainment designed to raise awareness about HIV to the audience. The most common activities were dramas, poetry and musical items.

Besides the weekly training sessions the HIV project also arranged special events, such as, a training weekend at Koinonia, visit to the Lilly of the Valley and inter school competitions on Youth Day. Some steps have also been taken towards sustainability by encouraging peer groups from different schools to maintain contact with each other.

As far as can be established little or no emphasis was placed on preparing trainees to individually communicate prevention messages to their peers. It should also be noted that little or no follow-up or supervision was offered to trained peer educators. The reason for this is partly to be found in the short time between the completion of training and the present study.

6.4.1.2 Primary Schools

Peer groups in primary schools are known as anti AIDS clubs. There are two important differences between anti AIDS clubs and peer groups. Firstly, the training was conducted by teachers with motivators paying sporadic visits mainly to monitor the AIDS messages of the various songs and dramas to be performed. Secondly, the training of anti AIDS clubs never developed beyond general messages about HIV. For example, care was taken not to mention subjects such as condoms and sexual intercourse. The message given to learners and the message communicated via the rehearsed activities of clubs was that AIDS exists, that it is dangerous and that people should say 'no'. When asked the reason for diluting the message to anti AIDS clubs motivators answered that a stronger message might have offended parents. There was also the feeling by some that a stronger, more explicit message was somewhat irrelevant to children at primary school level.

6.4.2 Teacher Training

In 1997 quite unbeknown to the BCSP the DOE had begun implementing its own Teacher Training Project (TTT). The aim of the project was to train 1000 KZN secondary teachers to be AIDS Prevention educators. Courses were 5 days in duration and the trainers were representative of a variety of NGOs and private individuals. A number of teachers from the

Berville district were trained in this manner by the author. After the TTP came to an end in May 1998 the BCSP recruited the author as a teacher trainer. In March 1999 the author conducted a workshop with motivators to determine what the specific outcomes should be of teachers trained under the auspices of the BCSP.

6.4.2.1 Skills to be Taught Teachers during Teacher Training

- 1 Selecting and presenting Lifeskills
- 2 Motivating and equipping colleagues to become involved in HIV/AIDS prevention
- 3 Fundraising
- 4 Basic Counseling skills
- 5 Planning and Organizational skills especially for working alongside the CSP
- 6 Skills to use the course resource manual effectively
- 7 Skills to find and make use of other resources

In addition to the above it was decided that teachers who had attended the training should only receive certificates some time after the course. This period would be regarded as a kind of 'internship' in which teachers could demonstrate competence in the above skills.

Since 1997 the project has focused almost exclusively on school based reproductive health education through Peer Education. The above recommendations have not informed the project's practice since 1997 and do not form a part of the present evaluation.

II THE PRESENT STUDY

1 AIM OF RESEARCH

A Summative evaluation of the long term AIDS prevention objectives of the BDCSP has been beyond the scope of the present research. One of the reasons is that in most cases the Peer Education groups have not been in operation long enough to derive an accurate indication of attitudinal or behavior change amongst the target population. A recent UNAIDS review of education programs listed post-test measurements made too close to program completion as one of the methodological weaknesses of many program evaluations (UNAIDS, 1997).

Given the above the present evaluation was conceptualized as a Formative evaluation of the implementation of the HIV project. The purpose of the evaluation has been to a) inform the BDCSP and its funders as to whether the project is being implemented as planned and, b) derive some indication as to whether the ultimate goals of the project are likely to be realized or not.

Research Question

How effective has the HIV project been thus far in i) equipping peer educators to influence the at-risk behavior of their peers and ii) equipping teachers to play a supportive and meaningful role in school based AIDS prevention activities

2 METHOD

2.1 Outline of activities

1 Planning Evaluation *Is the project being conducted as planned?*

<u>Subquestion</u>	<u>Data Collection</u>	<u>Respondents</u>	<u>Schedule</u>
1a What were the original objectives, strategies, budget, staff requirements and timelines of the Project?	Interview	Project manager Team leader Team members	Aug 25 Aug 30-Sept 3

2 Progress Evaluation *What progress has been made by the Project towards meeting its ultimate goal of contributing towards AIDS prevention*

<u>Subquestion</u>	<u>Data Collection</u>	<u>Respondents</u>	<u>Schedule</u>
2a How many teachers have been trained?	Project records		Aug 30-Sept 3
2b How were teachers selected?	Interview	Team members	
2c How actively are teachers implementing their training?	Questionnaire Interview	Teachers	
2d How many PEs have been trained?	Project records		
2e What is the content and format of the training?	Project records	Trainers	
2f In terms of	Questionnaire	PEs	

HIV/AIDS what are the knowledge levels, attitudes, sexual behaviors and lifeskills competencies of these trained PEs?

2g How active are trained PEs in disseminating an anti-AIDS message in their schools and communities?	Questionnaire	PEs and non PEs
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2h How are PEs perceived by their peers and teachers?	Questionnaire	Non PEs teachers
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2i What has been the experience of BCSP trainers of the Project?	Questionnaire Interview	Trainers
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2.2 Instruments

Three questionnaires were adapted and translated for use in the study. The first two questionnaires were anonymous, translated into isiZulu and aimed at school going secondary and primary school youth (See appendix 1). The questionnaire was mainly YES/NO in format but also contained open ended questions.

The second questionnaire was completed by teachers who had been trained by the HIV project (see RESULTS section).

Besides questionnaires the research also relied on interviews with key role players as well as the examination of past records and material used by of the HIV project.

2.3 Research Team

The BDCSP arranged for 5 male and 5 females to be trained as field workers to assist with the administration of the questionnaires.

The data analysis was outsourced to Dr Noleen Loubser. Dr Loubser also assisted with the

formulation of the questionnaires

2.4 The Target Population

By the time of the study the HIV project had identified 30 schools (7 high schools and 23 primary schools) in which peer educators had been fully trained'

2.5 Pilot Study

The pilot study (conducted over one day) served a dual purpose firstly it provided an opportunity to test the usefulness of the questionnaire and secondly it provided an opportunity to train the field workers in the particular data gathering method of the evaluation

For the purpose of the pilot study, data was gathered from 3 primary schools and 2 high schools. As a result of the pilot study some minor alternations were made to the questionnaire and in the administration of the questionnaire

2.6 Sampling

Because of the low number of trained peer educator groups (only 30) the study made use of all groups excluding those schools which had participated in the pilot study

In order to determine the treatment effects on trained peer groups, members of peer groups were matched with non-peer group members. Non-members were matched with peers for age, grade and gender

2.7 Actual Data Gathering

Actual data gathering occurred over 3 days. Because of the sensitive nature of some of the questions, male and female field workers were paired

After collecting questionnaires, field workers categorized the responses of the open ended questions and coded them accordingly

1041 primary and high school questionnaires were returned. On closer inspection it became clear that one of the five teams of field workers had matched incorrectly on two consecutive days of data gathering. Instead of matching for gender (that is, male-male and female-female) this team had paired same age and grade males with same age and grade females. In all 358 responses were affected and had to be discarded. The final number of scripts which were available for data analysis was therefore 683

2.8 Statistical analysis

In the research proposal, 10 days were allocated for statistical analysis. Because of time restraints key questions were targeted and matched peer group and non-peer group responses

were compared using CHI Square and cross tabulations After that schools were compared as discreet units on measures such as basic knowledge, sexual activity and condom usage

Teacher responses are reported as percentages

III RESULTS

1 PRIMARY SCHOOLS

All scores represent the mean percentage of correct answers per section
For example, in School 6 the mean percentage for the Basic Knowledge section is 57% Since there are 7 Basic Knowledge questions the mean number of correctly answered questions in this section was between 3 and 4 From the key it is clear that School 6 is Manyonjane CP

Section Basic knowledge

	School 6	School 7	School 8	School 9	School 10	School 11
Peer	57	57	47	54	58	44
Non-peer	49	55	28	40	60	51

Significant

Peer vs non peer ($F(1, 249)=5.31$, $p=0.0212$) Peer group scored better in most cases
Different schools ($F(7, 249)=4.59$, $p=0.0001$)

Section Transmission

	School 6	School 7	School 8	School 9	School 10	School 11	School 12
Peer	83	74	46	87	79	77	97
Non-peer	72	75	50	77	68	63	94

Significant

Peer vs non-peer ($F(1, 249)=8.37$, $p=0.0038$) Peer group scored better
Different schools ($F(7, 249)=12.85$, $p=0.00001$)

Section Prevention

	School 6	School 7	School 8	School 9	School 10	School 11	School 12
Peer	54	47	53	63	53	55	78
Non-peer	48	40	51	55	45	43	78

Significant

Peer vs non-peer ($F(1, 249)=7.76$, $p=0.0053$) Peer group scored better
Different schools ($F(7, 249)=7.4$, $p=0.00001$)

Section Sexually active

	School 6	School 7	School 8	School 9	School 10	School 11
Peer	20	4	29	28	10	24
Non-peer	15	5	29	17	0	20

Section Practice safer sex - insufficient data Nearly all indicated no condom use

	School 6	School 7	School 8	School 9	School 10	School 11	School 12
Peer							
Non-peer							

Section Belief in abstinence before marriage

	School 6	School 7	School 8	School 9	School 10	School 11	School 12
Peer	68	63	40	56	40	47	47
Non-peer	45	68	65	28	63	33	47

Section Self-concept

	School 6	School 7	School 8	School 9	School 10	School 11	School 12
Peer	40	32	48	53	40	30	38
Non-peer	25	40	32	35	38	28	48

SCHOOL KEY

School 6	Manyonjwane CP
School 7	Ezwelethu
School 8	Vukuzithathele
School 9	Langkloof
School 10	Oppermanskraal
School 11	Obomjaneni
School 12	Nokopela
School 13	Manduluza

Section Basic knowledge

	Amangwane	Bangani	Sokesimbone	Tholithemba	Amazizi
Peer	88	87	82	87	85
Non-peer	90	78	80	72	78

Significant Peer vs non-peer ($F(1,126)=4.01, p=0.0475$ Peer group scored better)
 Not significant Different schools ($p=0.1866$)

Section Transmission

	Amangwane	Bangani	Sokesimbone	Tholithemba	Amazizi
Peer	97	89	83	91	94
Non-peer	89	76	90	86	86

Significant Peer vs non-peer ($F(1,126)=3.70, p=0.0566$ Peer group scored better)
 Not significant Different schools ($p=0.1080$)

Section Prevention

	Amangwane	Bangani	Sokesimbone	Tholithemba	Amazizi
Peer	78	80	73	82	87
Non-peer	83	75	70	80	72

Not significant Peer vs non-peer ($p=0.3747$) and Different schools ($p=0.6427$) Equivalent knowledge (or lack thereof) about prevention

Section Correct Condom Usage

	Amangwane	Bangani	Sokesimbone	Tholithemba	Amazizi
Peer	55	52	33	50	40
Non-peer	42	24	22	40	0

Section Percentage sexually active

	Amangwane	Bangani	Sokesimbone	Tholithemba	Amazizi
Peer	79	71	38	40	70

Non-peer	75	56	33	50	83
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Section Practising safer sex

	Amangwane	Banganı	Sokesimbone	Tholithemba	Amazızi
Peer	40	42	20	60	50
Non-peer	45	0	25	50	20

Section Belief in abstinence until marriage

	Amangwane	Banganı	Sokesimbone	Tholithemba	Amazızi
Peer	32	38	55	10	30
Non-peer	20	39	33	50	50

Section Have been at risk

	Amangwane	Banganı	Sokesimbone	Tholithemba	Amazızi
Peer	28	24	50	22	40
Non-peer	15	37	33	10	17

Section Self-concept

	Amangwane	Banganı	Sokesimbone	Tholithemba	Amazızi
Peer	72	62	67	73	67
Non-peer	75	47	53	63	67

Section Gender and Correct Condom Use

	Yes	No	Don't Know
Males	51,7	36,7	11,7
Females	28,6	47,1	24,3

These results were statistically significant ($\chi^2(2) = 9,525, p=0,0492$) showing higher confidence amongst males and lower confidence among females

3 RESPONSES TO OPEN ENDED QUESTIONS (HIGH SCHOOL and PRIMARY SCHOOL

6 Does anybody have a cure for AIDS?	Yes no I don't know
7 If you answered YES for number 6 please say who may have a cure	1 A particular nyanga in Ngutu 2 A particular unidentified person 3 Religious faith 4 Western medicine

59 The Peer Helper Program helped me

	1 to help others 2 to live with the community 3 better self esteem 4 I have learnt the seriousness of this disease 5 To be honest 6 To want to volunteer and help others 7 To want to be a doctor one day 8 To help others who are HIV positive
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60 When making decisions about your own sexual behavior, what things have you learnt during your training as a Peer Educator which have helped you make those decisions?

- 1 The value of abstinence
- 2 Independence (I am responsible for my own behavior)
- 3 to use a condom
- 4 to know what kind of partner I want
- 5 to know about prevention
- 6 to respect my rights
- 7 the importance of one faithful partner in relationships
- 8 it gave me information about sex
- 9 I learnt about sexual diseases
- 10 I learnt where to get help for my problems
- 11 I learnt the dangers of early sexual activity
- 12 I learnt to be self confident

62 How can the program be improved to be more helpful to other Peer Helpers in future?

- 1 organize more meetings of peer helpers in our school
- 2 we should be better role models
- 3 we need more peer helpers
- 4 better cooperation between members of the group
- 5 to use effective ways of spreading the AIDS prevention message
- 6 we need to be more active in spreading the ant AIDS message
- 7 we need more encouragement
- 8 we need more training
- 9 we need the help of a 'health station' which distributes health information in our school
- 10 Train the present matrices so that they have skills for employment next year and so that they can help with the spread of AIDS prevention in the school and community next year
- 11 Organize more meetings between the peer educators of different schools
- 12 use audio visual material in our training and for our use
- 13 get media coverage for the work that we do

4 TEACHER RESPONSES

TEACHER FEEDBACK FORM (Confidential)

We are busy evaluating the efforts of the CHILD SURVIVAL PROJECT. It would help us if you answered the questions on this questionnaire as honestly as possible. You may remain anonymous if you choose. Your name will not be reported in the research report.

Section 1 BIOGRAPHICAL

1 NAME
2 SCHOOL
3 APPROXIMATE DATE OF TRAINING e.g. May 1998 / second term 1997

Section 2 COMPETENCIES

Please indicate whether you 'Agree' (1), 'Disagree' (2) or are 'Uncertain' (3) about each of

the following statements Circle the number which best represents your viewpoint

I FEEL CERTAIN THAT I COULD TEACH LEARNERS IN MY SCHOOL

	Agree	Disagree	Uncertain
3 3 ways in which HIV is transmitted	100%		
4 3 methods of preventing the spread of HIV	94%	1%	
5 how to use a condom correctly so that it does not slip off , tear or leak	58%		41%

Section 2 IMPLEMENTATION

	YES	NO
6 Were you involved in AIDS prevention activities in your school BEFORE you attended the Child Survival training course?	47%	52%
7 Has the Child Survival training course given you more skills with which to do AIDS prevention in your school?	76%	3%

We would like to know what things you have ATTEMPTED to do since your Child Survival Project training course It is not important whether you SUCCEEDED or not, we would only like to know what you have attempted

I HAVE ATTEMPTED TO

	YES	NO
8 Do activities/ask questions to better understand the sexual attitudes and practices of the children in my school	100%	
9 Make use of organizations outside my school such as the Department of Health and NGOs to promote AIDS prevention in my school	41%	52%
10 Present sexuality and lifeskills information to children at my school	76%	11%
11 Distribute condoms to learners in my school	22%	66%
12 Support the Peer Educator (or Anti AIDS club) group in my school	68%	11%
13 Motivate my colleagues to become involved in AIDS prevention	82%	17%
14 Have sexuality and Lifeskills education included in the school timetable	22%	66%
15 Raise funds for AIDS prevention activities	41%	41%
16 Provide individual counselling in matters of sexuality and Lifeskills	51%	33%
17 Work closely with members of the Child	76%	22%

Survival Project within the school	
18 To gather additional information about matters like AIDS, sexuality and Lifeskills	82% 11%
19 Anything else? (please indicate what this has been)	<ul style="list-style-type: none"> • Spread the anti AIDS message through drama, song, poetry • Inform parents re anti-AIDS teaching

Section 3 PERCEPTIONS

	YES	NO
20 Do you think it is possible to slow down the spread of HIV/AIDS amongst young people of school going age?	94%	6%

If you answered NO for question 20 please answer question 21 If you answered YES for question 20 please go to question 22

21 Why do you feel that it is not possible to slow down the spread of HIV/AIDS amongst young people in schools? (please circle)	<ol style="list-style-type: none"> 1 young people do not believe that HIV/AIDS exists 2 young people do not know how to prevent the spread of the HIV/AIDS 3 young people are not able to change their risk behaviors' like being sexually active, not using condoms, having many partners (17%) 4 another reason 	
22 Do you think that the <u>majority</u> of young people in schools could be persuaded to practice sexual abstinence? (to delay sexual activity until they are ready for marriage)	58%	17%
23 Do you think that the <u>majority</u> of sexually active young people in schools could be persuaded to use condoms every time they have sex ?	64%	17%

Section 4 PEER EDUCATION

	YES	NO
24 Do you think that Peer Education groups (Anti AIDS clubs) could help to slow down the spread of HIV/AIDS in schools?	66%	6%

25 Please give the reason (s) for your answer to question 24

- positive peer pressure
- peer peer communication most effective

26 Do you have any suggestions for improving the effectiveness of Peer Education groups (Anti-AIDS clubs) in your school?

- PEs should set better examples
- Lifeskills HAS to be time tabled
- PEs must learn sympathy for the infected

27 Can you think of ways in which the Child Survival Project could work more effectively in your school to assist with AIDS prevention?

- More regular follow-ups
- Supply resources e.g. audio visual material, additional training, POWs
- Include the teacher in PE activities
- Meet with parents

28 Is there anything else which you would like to add?

- We have great time pressures
- Please put pressure for Lifeskills to be made official policy

5 COMPARISON OF PROJECT PLANNED INPUTS AND OUTPUTS / ACTUAL INPUTS BY END OF PROGRAMME

PLANNED INPUT	ACTUAL INPUT BY END OF PROGRAMME
7 Training of additional sexuality education motivators	1 By the end of the programme 10 motivators (5 male and 5 female) had been trained and utilized in the programme

8 Training of primary and high school teachers	2 By the end of the programme primary and high school teachers had been trained
9 Training of parenting groups	3 Did not happen
10 Training of men, church and community leaders	4 Started but not continued
11 Development of key HIV/AIDS education curriculum for messages on sexuality, relationships and communication (lifeskills curriculum)	5 It would be more accurate to say that the lifeskills curriculum was collated from a range of existing sources No new curriculum was developed
12 Assessment of need for additional sites for condom distribution and social marketing possibilities	6 No formal assessment was undertaken At best the programme might be partly responsible for the establishment of a 'help yourself' condom distribution box outside one of the clinics

6 OBSERVATIONS FROM MOTIVATORS' MONTHLY REPORTS

WEAKNESSES/DIFFICULTIES	STRENGTHS
1 Moralizing tone <i>we asked every PE to mention how many smokers in the classroom and to say who the people are whom they buy cigarettes from</i> (Oct 98)	1 Good records
2 Frustrations opposition from some principals and teacher dropout	2 Developed sensitivity to teacher involvement
3 Irregular follow-ups of AA groups	3 Cross visits amongst teachers
4 Ill - defined performance measures for AA groups	4 Exchanges with other initiatives e g PPASA
5 Mixed message re condoms e g 'Doctors for life' and visiting Christian groups	5 Trained Ladysmith team
	6 Suggestions e g job creation as part of curriculum, PE's condom distribution
	7 Multi sectorial
	<ul style="list-style-type: none"> • Child health workers • Mobile clinic

	<ul style="list-style-type: none"> • PWAs • Parents of Peer educators • PEs from other schools • Traditional healers • Teachers
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IV DISCUSSION

1 Primary Schools

1.1 Basic Knowledge

There appears to be a tremendous range of correct responses amongst the anti AIDS (AA) club members from school to school. Correct responses on the Basic Knowledge section ranged from 43% (school 3) to 65% (school 12). The variability can probably be ascribed to within-school differences such as AA club teacher and available time. The relatively low scores on Basic Knowledge questions suggests some serious shortcomings in the knowledge component of the training program of most AA clubs.

Ironically, the results suggest that, in many cases, the same learners who perform in anti AIDS dramas and songs might themselves have very limited knowledge of basic issues around HIV/AIDS.

Overall the data analysis suggests a significant difference between the Basic Knowledge of AA club members and non-AA club members.

1.2 Transmission

The same comments made with respect to the basic knowledge of AA members could also be made regarding their knowledge of Transmission and Prevention matters. Given the fact that very little is said about condoms in primary schools this result is not surprising.

1.3 Sexual Activity

Responses to this question suggest that 16,5% of AA club members have experienced at least one instance of vaginal or anal penetration. Further data analysis would be required to determine the ages of these learners and to gather more information on details such as frequency, most recent sexual experience, and number of partners.

As with the previous sections there is great variance between the schools (0% to 29%).

1.4 Belief in Abstinence

It appears that less than half of AA club members believe that abstinence is possible.

1.5 Self Concept

More than half of the responses of AA club members and non-AA members suggest that they associate sexual activity with enhanced Self Concept.

1.6 Summary

The only positive result which emerges from the Primary Schools analysis is that AA club members generally have more knowledge about basic knowledge, transmission and prevention than non-AA club members. When one examines the responses of AA members in more detail it soon becomes clear that their knowledge of these matters, although better than their non-AA peers, is nevertheless appallingly low.

Part of the reason for these low scores amongst AA members is to be found in the diluted messages they receive about transmission and prevention. Another part of the explanation is surely in the fact that much of the time of AA members is taken up with practicing for performances.

The above results are all the more serious given the finding that 1 in 6 Primary school children has experienced penetration at least once.

2 High Schools

The overall finding seems to be that there is a significant difference between PEs and non-PEs in information related to basic knowledge and transmission of HIV. PEs scored less impressively in the section testing knowledge of prevention. Of concern here was the high number of PEs who thought that contraception, such as, the pill in women prevented the spread of HIV.

Given the finding that 60% of respondents had experienced penetration it was disturbing to find that only 42.4% of PEs and 28% of non-PEs practiced safer sex. Part of the reason for this figure might be due to the fact that less than half of respondents were confident about using a condom correctly.

The results indicate significant gender disparities with regard to correct condom use. This finding supports the results of the Murphy study (section 2) and suggests that condom education is most effective when at least part of the presentation is to same-sex audiences.

The relatively high number of non-virgins is consistent with the equally high number of respondents who reject abstinence (63% in PEs).

One unexpected result appears to support the Psychosocial theory of risk behavior referred to in section 4.2.5 of this report. Despite the high incidence of reported risk behavior from unprotected sex, there is a surprisingly low acknowledgement of risk for HIV (32% in PEs and 22.4% in non-PEs). Proponents of the Psychosocial approach to risk behavior would argue that respondents have made use of Defence Mechanisms: they know they are at risk for HIV infection but their Egos are defending against this reality by means of Psychological Defence Mechanisms such as Denial and Rationalization ('it won't happen to me').

Responses to the Self Concept section suggest that the average PE currently experiences some conflict between preventative behavior and maintaining a positive Self Concept. For example, the average PE would have agreed to at least 2 statements such as 'real men don't

use condoms

3 Teacher responses (N=38)

The teacher response forms were from the same 18 primary schools and 5 high schools as the learner forms. In some cases more than one teacher from a school completed forms.

Since condom education did not feature as part of the teacher course and since most of the teachers represent primary schools it is not surprising that almost half do not feel competent to effectively teach condom use.

The results are heartening in that most teachers are active in some way in AIDS prevention activities, from simply being attentive to the sexual attitudes of learners to distributing condoms.

94% of respondents believe that the spread of HIV can be slowed in schools. 58% of teachers believe that abstinence is possible among school goers. This optimistic figure is mainly representative of primary teachers and might also be a reflection of adult wishful thinking. The reader will recall that slightly less than half of primary school learners and far fewer high school learners believed abstinence was an option.

In terms of multi sectorial cooperation it is encouraging to see that 66% of respondents believe that PEs could exert a positive influence on peers and in that way slow the spread of HIV.

It is important to note teachers expressed needs for teacher support and follow-ups.

4 Peer Education

It has already been stated that PE was adopted by the BCSP because it offered a more expedient means (than the 'whole school' approach) of achieving the aims of the project. It has been shown that the aims of the BCSP HIV project were primarily the transfer of knowledge about HIV/AIDS. The various strategies adopted by this particular PE program were therefore consistent with the overall aim of the project. Two points of comparison are offered.

Firstly, when compared with the emphasis of the Port Elizabeth Technikon Peer Education program (section 5.2) the training which the Bergville PEs received was almost exclusively related to information about sexuality and HIV/AIDS. Even Lifeskills, such as decision making or assertiveness, were explored mainly for the purpose of equipping PEs to combat the spread of HIV. Of all the theories which underpin prevention programs the rational Health Belief Model is most clearly visible in the operation of the HIV project. This is hardly surprising since the HIV project is located within the Health system.

By contrast the Technikon Peer Education program is different in design and operation. Here the emphasis is more on enhancing the communication and interpersonal skills of the participants because these attributes more than any 'message' are seen as the main strengths.

of the Peer Education program. In this respect the Technikon program resembles the Psychosocial theory because it acknowledges powerful human internal realities such as Self Concept, loneliness and the need for recognition.

Secondly, the practical, outreach' component of the HIV project Peer Education program was comprised almost exclusively of various strategies for transmitting information about HIV/AIDS, for example, participation in poetry, dramas, musicals, presentations etc. Interestingly, these activities, despite their entertainment value for peers, are remarkably impersonal and static modes of communication. In contrast, the explicit purpose of the Technikon programme is to spread its messages through the interpersonal (as opposed to entertainment) skills of the PEs.

5 Motivators' Monthly Reports

The Motivators' Monthly Reports Table presents a number of the weaknesses and strengths of the HIV project since 1997. Information was derived from the monthly reports submitted by motivators.

The weaknesses of the project have been

- The tendency, at times, on the part of motivator's to adopt a moralizing and patronizing tone
- Irregular follow-ups and ill-defined performance measures for the anti AIDS groups in Primary schools. It is understandable that the follow up of AA groups suffered during times when i) motivators were busy with other tasks and ii) so many of the AA groups were staffed by competent enthusiastic teachers. Nevertheless the sporadic manner in which follow up happened probably robbed the project of opportunities to evaluate the progress of AA groups and make interventions.

Regarding performance measures for AA groups. Motivators seemed content to measure outcomes by polished songs and dramas rather than to establish the real understanding which AA members had of HIV matters. It must also be remembered that the Health Model paradigm in which the project has operated may have stifled the exploration of alternative performance measures.

- Both in discussions with motivators and from monthly records it is clear that considerable hesitancy surrounded the prevention message communicated to peers. Should the message be primarily condom or abstinence? This tension was most keenly felt when the project received visits from other Christian organizations.

The above notwithstanding, the HIV project has also demonstrated some enviable strengths

- One of the greatest strengths of the project has been the excellent relationship it has cultivated with the Department of Education through its teacher training efforts. Not only have teachers been effectively trained but structures have also been established to ensure that teachers continue to network with each other to ensure sustainability of the programme.
- The HIV programme has been truly multi sectorial. Besides the DOH and DOE the

programme has also networked with other NGOs Parents, community leaders and private trainers

- Finally, it was pleasing to see motivators, through the medium of the monthly report, make useful suggestions and raise important issues pertinent to the project

6 Summary

The achievements of the HIV project over a short period of time have been impressive The main objectives set after the mid-term evaluation have been achieved

- peer educators know significantly more about the transmission and prevention of HIV than their peers who were not exposed to intensive training by the motivators
- Many of the schools in the area boast project-trained teachers who are actively and independently contributing towards AIDS prevention amongst young people

In addition to the above, previously disempowered school communities have begun to realize their own role in AIDS prevention and some wonderful networking has occurred

Naturally the present evaluation has also raised some concerns and questions

- The Health Belief Model which has dominated the HIV project has many limitations when applied to AIDS prevention,
- For a Peer Education programme far too little attention has been devoted to helping PEs develop relationships with their at-risk peers
- For a peer education programme too little attention has been paid to understanding and remediating the at-risk behaviors of the PEs themselves
- Outcome criteria have been ill-conceived something is wrong when anti AIDS club members deliver very polished AIDS prevention messages through song and drama but they themselves do not understand the fundamentals of transmission and prevention
- If prevention is such a strong component of the programme why is condom education approached in such a tentative and theoretical manner
- Are there lessons to be learnt from the content and aims of other local PE programmes such as PPASA and the Port Elizabeth Technikon

7 RECOMMENDATIONS

'AIDS prevention takes time But if prevention is sustained and well focused countries can count on success In the end their efforts will pay off

(Dr Piot UNAIDS executive)

The HIV project has begun an excellent work What follows are some suggestions for the further development of these efforts

- 1 'Going deep' One of the restraining factors in the project thus far has been the fact that motivators have been over stretched and have had to work in too many schools at one time Besides the personal frustrations this has also had the effect of stifling follow-up and depriving the project of the process of ongoing self-regulation

During the evaluation one of the motivators coined the expression 'going deep'. Through this he was trying to suggest that the next phase of the project should select a smaller number of schools to work in. The aim of the next phase should be to develop and test more effective AIDS prevention strategies.

2 There are a number of strategies worth testing and developing

- One such initiative would be the incorporation of theoretical models other than the Health Belief model with its emphasis on biological content and information. The Peer Education model in place at the Port Elizabeth Technikon makes explicit use of the Psychosocial model by providing training in interpersonal relationships and communication.
- Another model deserving of inclusion in the work of the project is Social Cognitive Learning Theory. Interventions such as Behavioural Analyses (see 4.2.4) could bring important information to behaviour change interventions in the project area.
- It is recommended that the HIV project liaise with the Northern Province Adolescent Health Programme currently in its second phase. One of the warnings in the HST publication of School Based Reproductive Health Programmes is that these programs so often 'reinvent the wheel'.
- It is recommended that the HIV project collaborate with Soul City in the testing and development of its materials.
- Up to now another undeveloped aspect of the HIV project has been that of assisting parents in developing communication strategies with their children around sexuality issues. This focus area might also provide churches with a point of entry into the field of AIDS prevention.
- If the project is to truly embrace condom education then it ought to do so by making use of wooden demonstration models and by aggressive social marketing through the local media.
- Likewise, if abstinence is going to be presented as a serious alternative to early sexual activity then it too should be accompanied by an aggressive marketing strategy using high profile school and community role models.
- Gender differences in prevention behaviour requires greater attention. A simple way in which gender differences can be accommodated is to present certain topics to same-sex groups, for example, condom application skills.
- One important multi-sectorial intervention which has been overlooked thus far is the need to lobby the local DOH for the inclusion of sexuality education as part of the weekly curriculum.

3 It is recommended that additional funds be allocated for further analysis of the data collected during the present study

- 4 In order to use an intensive Action-Research model of intervention such as that described above it is recommended that the project team should include a person with the requisite research skills

Please feel free to make contact me with regard to any aspect of the above report

Thank you for the privilege of being closely associated with the evaluation of the BDCSP HIV project

Sincerely

COLIN MCKAY

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APPENDIX 1

HIGH SCHOOL EVALUATION QUESTIONNAIRE (including responses to open ended questions)

Number _____

School _____

We would like you to complete a questionnaire. The questionnaire is CONFIDENTIAL. We do not ask for your name and nobody will know who answered this questionnaire. We have chosen to make this a confidential questionnaire because we want you to feel SAFE to give your honest answers to the questions on these pages.

Please read the questions carefully and work quickly. To the right of each question are some numbers. Answer each question by drawing a circle around the number of your choice. For example, in the first question, if you are a member of the school Peer Helper group please circle the 1 next to 'YES'. If you are not a member of the Peer helper group please circle 2 next to NO.

Section 1 BIOGRAPHICAL

1 Are you a member of the school peer helper group?	YES NO	1 2
2 Are you a boy or a girl?	Boy Girl	1 2
3 How old are you in full years?	years	
4 In which grade are you?	Grade	

Section 2 BASIC KNOWLEDGE

	YES	NO	DON T KNOW
5 Do you believe that the illness known as HIV/AIDS really exists?	1	2	3
6 Does anybody have a cure for AIDS?	1	2	3
8 If you answered YES for number 6 please say who may have a cure	5 A particular nyanga in Nqutu 6 A particular unidentified person 7 Religious faith 8 Western medicine		

8 How does having an STD (sexually transmitted disease) affect someone's chances of getting HIV? Please circle	1 it makes no difference 2 It makes it harder to get HIV 3 It makes it easier to get HIV
9 What kinds of things could happen to a person who gets HIV/AIDS? Please circle the answers which you feel are correct	1 Nothing will happen 2 I don't know 3 The person could get other diseases
10 What problems could happen if a young person of school – going age became sexually active? Please circle the answers which you feel are correct	1 No problems 2 the girl could become pregnant 3 The person could get HIV/AIDS 4 The person could get STDs 5 The parents of the person could become upset 6 The girl could get cervical cancer

	YES	NO	DON'T KNOW
11 Is it possible for a school girl to become pregnant the first time she has sex?	1	2	3
12 Can a person look healthy and still be HIV positive ?	1	2	3

Section 3 TRANSMISSION

In this questionnaire the expression having sex refers to the times a penis is inserted into a vagina or anus

Do you think you could easily get HIV/AIDS

	YES	NO	DON T KNOW
13 By sitting next to someone who has HIV/AIDS?	1	2	3
14 By having sex with someone who has HIV/AIDS without using a condom?	1	2	3
15 By sharing food with someone who has HIV/AIDS?	1	2	3
16 By using a toilet after an HIV/AIDS person has used it?	1	2	3
17 By swimming / bathing in the same water as someone with HIV/AIDS ?	1	2	3
18 By using a blade (for gcaba) after it has been used by someone with HIV/AIDS?	1	2	3
19 By touching the sweat (jaluka) of someone who has HIV/AIDS while playing sport together?	1	2	3
20 if the blood of a person with HIV/AIDS touches sores on	1	2	3

your body ?			
21 By wearing clothes used by a person with HIV/AIDS?	1	2	3

Section 4 PREVENTION

Which of the following practices will help to protect people from getting HIV/AIDS

YES NO DON'T KNOW

22 Using birth control pills when having sex without a condom	1	2	3
23 Being faithful to one sexual partner without using a condom if you are not sure that your partner is faithful to you	1	2	3
24 using a condom when having sex	1	2	3
25 Being abstinent (not sexually active)	1	2	3
26 Touching and hugging your partner without having sex	1	2	3
27 Being faithful to one sexual partner if you are sure that you and your partner are faithful to each other and you are both uninfected	1	2	3

Section 5 CONDOM USAGE AND ATTITUDES

YES NO DON T KNOW

28 Do you know how to use a condom correctly so that it does not leak after use slip off or tear?	1	2	3
29 Have you ever asked for a condom?	1	2	3

If you answered YES for question 29 go to question 30 If you answered NO for question 29 go to question 32

30 Where did you get the condom(s) Circle one or more	1 The clinic 2 The hospital 3 The child survival project 4 A chemist 5 A teacher 6 A peer educator 7 A friend 8 My partner 9 somewhere else 10 community health worker 11 free condom dispenser
31 How did you feel about asking for the condom(s) Circle one or more	1 No bad feelings 2 Scared 3 Embarrassed
32 Why have you never asked for a condom? Circle one or more	1 I am not sexually active 2 I am sexually active but I do not

	use a condom
3	I have never needed to ask for a condom because a condom always gets given to me
4	I don't know where to get a condom
5	I am scared to ask for a condom
6	I am embarrassed to ask for a condom
7	I don't know how to use a condom
8	No reason*

* translation error – should have read any other reason?

Section 6 BASELINE SEXUAL HISTORY

We would like to know more about your past behavior

33 In this question a number of different behaviors are described Circle the ones which you have done before in your life Boys read the column on the left and girls read the column on the right

BOYS ANSWER HERE

GIRLS ANSWER HERE

1 I have thought about what it must be like to have sex with someone	1 I have thought about what it must be like to have sex with someone
2 I have masturbated before	2 I have masturbated before
3 I have stimulated another person's private parts before <u>or</u> another person has stimulated my sexual parts before	3 I have stimulated another person's private parts before <u>or</u> another person has stimulated my sexual parts before
4 I have inserted my penis into someone else's vagina before	4 Someone has inserted his penis into my vagina before
5 I have inserted my penis into another person's anus before	5 Someone has inserted his penis into my anus before
6 None of the above	6 None of the above

Only answer questions 34-36 if you are sexually active (you circled numbers 4 & 5 above)

Section 7 ASSESSMENT OF RISK BEHAVIOR

34 When was the last time you were sexually active? Circle one or more	1 During this month
	2 During last month
	3 2 - 3 months ago
	4 4 - 6 months ago
	5 More than 6 months ago

Think of your sexual behavior during the last 3 months. If you are a male, try to remember the times that you were sexually active, that is, when you have put your penis into someone else's vagina or anus. If you are a female, try to remember the times you were sexually active, that is, someone else put their penis into your vagina or anus.

35 How many times has this happened? Circle one or more	1 Less than 5 times 2 5-10 times 3 more than 10 times
36 How many times has this happened without you or the other person using a condom? Circle one or more	1 We never use a condom 2 We always use a condom 3 Less than 5 times 4 5 times or more than 5 times
37 How many different people have you done this with? Circle one or more	1 One person 2 2 or 3 different people 3 more than 4 different people

Section 8 PERCEPTIONS

	YES	NO	DON'T KNOW
38 Do you think it is possible for young people to fall in love but to remain abstinent (not to be sexually active) until they are ready to be married?	1	2	3
39 In the past, where have you received most of your information about Sexuality? (Circle one or more from The list)	1 Someone older in my family 2 A friend 3 A minister 4 A male or female teacher 5 A Peer Helper 6 Someone from the Child Survival Project 7 A nurse or doctor 8 The radio 9 Magazines 10 TV 11 Somewhere else 12 (1) AIDS helpline 13 (2) My lover		
40 In the past, where have you received most of your information about AIDS? (Circle one or more from the list)	1 Someone older in my family 2 A friend 3 A minister 4 A male or female teacher 5 A Peer Helper 6 Someone from the Child Survival Project 7 A nurse or doctor 8 The radio 9 Magazines 10 TV 11 Somewhere else		

	12 (1) AIDS help line 13 (2) hospital 14 (3) books
41 If you were confused and needed to talk to someone about sexual things, who would you choose Please circle one or more from the list	1 Someone older in my family 2 A friend 3 A minister 4 A teacher 5 A Peer Helper 6 Someone from the Child Survival Project 7 A nurse or doctor 8 Someone else 10 (1) social worker 11 (2) my sister 12 (3) my neighbor 9 There is no-one I could talk to

	YES	NO	DON'T KNOW
42 Do you think that you are doing anything which place you at risk for getting HIV/AIDS?	1	2	3

Section 9 SELF CONCEPT

Below are some statements You must read each statement and decide whether you agree with the statement, disagree with the statement, or whether you can't decide

When you answer this question we want to know what YOU think not what older people do and say

	Agree	Disagree	Can't decide
43 Real men don't use condoms			
44 Real men do not practice abstinence			
45 I would feel less of a man / woman if I used a condom			
46 I would feel less of a man / woman if I practiced abstinence			
47 If I don't sleep with a lover I would feel unattractive to the opposite sex			
48 real men have lots of sexual partners/lovers			

Section 10 ONLY TO BE ANSWERED BY PEER HELPERS

Please indicate in what ways the Peer Helper Programme may have helped you Use not applicable if the statement was not discussed during your programme

The Peer Helper Programme helped me

	YES	NO	Not applicable
49 To understand the difference between love and infatuation			
50 Understand better the physical changes which happen during adolescence, for example pimples menstruation wet			

dreams, erections etc	
51 To decide the things which are important for me in relationships (choose my values)	
52 To realize that I am responsible for my own health and behavior	
53 To improve my relationship with friends	
54 To improve my relationship with my parents	
55 To understand myself better	
56 To know that abusing alcohol can affect the decisions which I make regarding my sexual behavior	
57 To protect myself from getting HIV/AIDS	
58 To be more assertive	
59 any other ways?	9 to help others 10 to live with the community 11 better self esteem 12 I have learnt the seriousness of this disease 13 To be honest 14 To want to volunteer and help others 15 To want to be a doctor one day 16 To help others who are HIV positive

60 When making decisions about your own sexual behavior, what things have you learnt during your training as a Peer Educator which have helped you make those decisions?

- 13 The value of abstinence
- 14 Independence (I am responsible for my own behavior)
- 15 to use a condom
- 16 to know what kind of partner I want
- 17 to know about prevention
- 18 to respect my rights
- 19 the importance of one faithful partner in relationships
- 20 it gave me information about sex
- 21 I learnt about sexual diseases
- 22 I learnt where to get help for my problems
- 23 I learnt the dangers of early sexual activity
- 24 I learnt to be self confident

61 I have participated in the following activities to spread the AIDS prevention message Circle one or more	1 Dramas 2 Poetry 3 Music 4 Speaking to groups 5 Speaking to individuals 6 Any other? <i>(no additional activities given)</i>
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62 How can the programme be improved to be more helpful to other Peer Helpers in future?

- 14 organize more meetings of peer helpers in our school
- 15 we should be better role models
- 16 we need more peer helpers
- 17 better cooperation between members of the group
- 18 to use effective ways of spreading the AIDS prevention message
- 19 we need to be more active in spreading the ant AIDS message
- 20 we need more encouragement
- 21 we need more training
- 22 we need the help of a health station which distributes health information in our school
- 23 Train the present matrics so that they have skills for employment next year and so that they can help with the spread of AIDS prevention in the school and community next year
- 24 Organize more meetings between the peer educators of different schools
- 25 use audio visual material in our training and for our use
- 26 get media coverage for the work that we do

Section 11 ONLY TO BE ANSWERED BY NON PEER HELPERS

	YES	NO	DON'T KNOW
63 Do you know of anything which the members of the Peer Helper group have done to try to educate the school / community about HIV/AIDS ?	1	2	3
64 Do you think that learners in the school want to listen to the messages of the Peer Helpers?	1	2	3

65 In what ways has your sexual behavior changed <u>as a result of the message of the Peer Educator group?</u> (Circle the options which apply to you)	<ol style="list-style-type: none"> 1 There has been no change 2 I have decided to use condoms 3 I have decided to be faithful to one partner 4 I have decided to have fewer sexual partners 5 I have decided to be abstinent until I am ready for marriage 6 Any other? <p>Some of the coding here was sloppy responses were coded which already appeared in the given answers</p> <p>(1) I have decided to abstain is the same as 5 above</p>
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	<p>(4) I have decided NOT to change my sexual behavior' is the same as I above</p> <p><i>genuine new additions were</i></p> <p>8 (2) I have decided to practice AIDS prevention</p> <p>9 (3) I have decided to have a blood test</p>
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THANK YOU FOR YOUR CO-OPERATION PLACE YOUR QUESTIONNAIRE IN THE BOX NO ONE YOU KNOW WILL SEE YOUR ANSWERS

APPENDIX 2

PRIMARY SCHOOL EVALUATION QUESTIONNAIRE (including responses to open ended questions)

Number _____

School _____

We would like you to complete a questionnaire. The questionnaire is CONFIDENTIAL. We do not ask for your name and nobody will know who answered this questionnaire. We have chosen to make this a confidential questionnaire because we want you to feel SAFE to give your honest answers to the questions on these pages.

Please read the questions carefully and work quickly. To the right of each question are some numbers. Answer each question by drawing a circle around the number of your choice. For example, in the first question, if you are a member of the school anti AIDS club please circle the 1 next to 'YES'. If you are not a member of the anti AIDS club please circle 2 next to NO.

Section 1 - BIOGRAPHICAL

1 Are you a member of the school Anti-AIDS club?	YES NO	1 2
2 Are you a boy or a girl?	Boy Girl	1 2
3 How old are you in full years?	years	
4 In which grade are you?	Grade	

Section 2 BASIC KNOWLEDGE

	YES	NO	DON T KNOW
5 Do you believe that the illness known as HIV/AIDS really exists?	1	2	3
6 Does anybody have a cure for AIDS?	1	2	3
9 If you answered YES for number 6 please say who may have a cure	9 A particular nyanga in Nqutu 10 A particular unidentified person 11 Religious faith 12 Western medicine		
8 What kinds of things could happen to a person who gets HIV/AIDS? Please circle the answers which you feel are	4 Nothing will happen 5 I don t know		

correct	6 The person could get other diseases
9 What problems could happen if a young person of school – going age became sexually active? Please circle the answers which you feel are correct	7 No problems 8 the girl could become pregnant 9 The person could get HIV/AIDS 10 The person could get STDs 11 The parents of the person could become upset 12 The girl could get cervical cancer

	YES	NO	DON T KNOW
10 Is it possible for a school girl to become pregnant the first time she has sex?	1	2	3
11 Can a person look healthy and still be HIV positive ?	1	2	3

Section 3 TRANSMISSION

In this questionnaire the expression having sex refers to the times a penis is inserted into a vagina or anus

Do you think you could easily get HIV/AIDS

	YES	NO	DON'T KNOW
12 By sitting next to someone who has HIV/AIDS?	1	2	3
13 By having sex with someone who has HIV/AIDS without using a condom?	1	2	3
14 By sharing food with someone who has HIV/AIDS?	1	2	3
15 By using a toilet after an HIV/AIDS person has used it?	1	2	3
16 By swimming / bathing in the same water as someone with HIV/AIDS ?	1	2	3
17 By using a blade (for gcaba) after it has been used by someone with HIV/AIDS?	1	2	3
18 By touching the sweat (jaluka) of someone who has HIV/AIDS while playing sport together?	1	2	3
19 if the blood of a person with HIV/AIDS touches sores on your body ?	1	2	3
20 By wearing clothes used by a person with HIV/AIDS?	1	2	3

Section 4 PREVENTION

Which of the following practices will help to protect people from getting HIV/AIDS

	YES	NO	DON T KNOW
21 Using birth control pills when having sex without a condom	1	2	3
22 Being faithful to one sexual partner without using a condom if you are not sure that your partner is faithful to you	1	2	3
23 using a condom when having sex	1	2	3
24 Being abstinent (not sexually active)	1	2	3
25 Touching and hugging your partner without having sex	1	2	3
26 Being faithful to one sexual partner if you are sure that you and your partner are faithful to each other and you are both uninfected	1	2	3

Section 5 BASELINE SEXUAL HISTORY

We would like to know more about your past behavior

27 In this question a number of different behaviors are described Circle the ones which you have done before in your life Boys read the column on the left and girls read the column on the right

BOYS ANSWER HERE

GIRLS ANSWER HERE

7 I have thought about what it must be like to have sex with someone	7 I have thought about what it must be like to have sex with someone
8 I have masturbated before	8 I have masturbated before
9 I have stimulated another person's private parts before <u>or</u> another person has stimulated my sexual parts before	9 I have stimulated another person s private parts before before <u>or</u> another person has stimulated my sexual parts before
10 I have inserted my penis into someone else's vagina before	10 Someone has inserted his penis into my vagina before
11 I have inserted my penis into another person's anus before	11 Someone has inserted his penis into my anus before
12 None of the above	12 None of the above

Only answer questions 28-31 if you are sexually active (you circled numbers 4 & 5 above)

Section 6 ASSESSMENT OF RISK BEHAVIOR

28 When was the last time you were sexually active? Circle one or more	6 During this month 7 During last month 8 2 - 3 months ago 9 4 - 6 months ago 10 More than 6 months ago
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Think of your sexual behavior during the last 3 months. If you are a male, try to remember the times that you were sexually active—that is, when you have put your penis into someone else's vagina or anus. If you are a female, try to remember the times you were sexually active—that is, someone else put their penis into your vagina or anus.

29 How many times has this happened? Circle one or more	1	Less than 5 times
	2	5-10 times
	3	more than 10 times
30 How many times has this happened without you or the other person using a condom? Circle one or more	5	We never use a condom
	6	We always use a condom
	7	Less than 5 times
	8	5 times or more than 5 times
31 How many different people have you done this with? Circle one or more	4	One person
	5	2 or 3 different people
	6	more than 4 different people

Section 7 PERCEPTIONS

	YES	NO	DON T KNOW
32 Do you think it is possible for young people to fall in love but to remain abstinent (not to be sexually active) until they are ready to be married?	1	2	3
33 up to now, where have you received most of your information about Sexuality ? (Circle one or more from The list)	14 Someone older in my family 15 A friend 16 A minister 17 A male or female teacher 18 A Peer Helper 19 Someone from the Child Survival Project 20 A nurse or doctor 21 The radio 22 Magazines 23 TV 24 Somewhere else 25 (1) AIDS help line 26 (2) My lover		
34 In the past, where have you received most of your information about AIDS? ? (Circle one or more from the list)	15 Someone older in my family 16 A friend 17 A minister 18 A male or female teacher 19 A Peer Helper 20 Someone from the Child Survival Project 21 A nurse or doctor 22 The radio 23 Magazines 24 TV 25 Somewhere else 26 (1) AIDS help line 27 (2) hospital 28 (3) books		

35 If you were confused and needed to talk to someone about sexual things, who would you choose Please circle one or more from the list	9 Someone older in my family 10 A friend 11 A minister 12 A teacher 13 A Peer Helper 14 Someone from the Child Survival Project 15 A nurse or doctor 16 Someone else 10 (1) social worker 11(2) sister 12(3) neighbor 17 There is no-one I could talk to

	YES	NO	DON T KNOW
36 Do you think that you are doing anything which place you at risk for getting HIV/AIDS?	1	2	3

Section 8 SELF CONCEPT

Below are some statements You must read each statement and decide whether you agree with the statement disagree with the statement or whether you can't decide

When you answer this question, we want to know what YOU think not what older people do and say

	Agree	Disagree	Can't decide
37 Real men don't use condoms			
38 Real men do not practice abstinence			
39 I would feel less of a man / woman if I used a condom			
40 I would feel less of a man / woman if I practiced abstinence			
41 If I don t sleep with a lover I would feel unattractive to the opposite sex			
42 real men have lots of sexual partners/lovers			

Section 9 ONLY TO BE ANSWERED BY ANTI AIDS CLUB MEMBERS

Please indicate in what ways the Anti AIDS club may have helped you Use not applicable if the statement was not discussed during your programme

The Anti AIDS club helped me

	YES	NO	NOT APPLICABLE
43 To realize that I am responsible for my own health and behavior			
44 Understand better the physical changes which happen			

during adolescence for example pimples, menstruation, wet dreams, erections etc	
45 To improve my relationship with friends	
46 To improve my relationship with my parents	
47 To understand myself better	
48 To protect myself from getting HIV/AIDS	
49 To be more assertive	
50 any other ways?	17 to help others 18 to live with the community 19 better self esteem 20 I have learnt the seriousness of this disease 21 To be honest 22 To want to volunteer and help others 23 To want to be a doctor one day 24 To help others who are HIV positive

51 When making decisions about your own sexual behavior, what things have you learnt during your training as a Peer Educator which have helped you make those decisions?

- 25 The value of abstinence
- 26 Independence (I am responsible for my own behavior)
- 27 to use a condom
- 28 to know what kind of partner I want
- 29 to know about prevention
- 30 to respect my rights
- 31 the importance of one faithful partner in relationships
- 32 it gave me information about sex
- 33 I learnt about sexual diseases
- 34 I learnt where to get help for my problems
- 35 I learnt the dangers of early sexual activity
- 36 I learnt to be self confident

52 I have participated in the following activities to spread the AIDS prevention message Circle one or more	7 Dramas 8 Poetry 9 Music 10 Speaking to groups 11 Speaking to individuals 12 Any other? <i>no others mentioned</i>
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53 How can the programme be improved to be more helpful to other Anti AIDS club members in future?	
27 organize more meetings of peer helpers in our school	
28 we should be better role models	
29 we need more peer helpers	
30 better cooperation between members of the group	

- 31 to use effective ways of spreading the AIDS prevention message
- 32 we need to be more active in spreading the ant AIDS message
- 33 we need more encouragement
- 34 we need more training
- 35 we need the help of a 'health station' which distributes health information in our school
- 36 Train the present matrics so that they have skills for employment next year and so that they can help with the spread of AIDS prevention in the school and community next year
- 37 Organize more meetings between the peer educators of different schools
- 38 use audio visual material in our training and for our use
- 39 get media coverage for the work that we do

Section 10 ONLY TO BE ANSWERED BY NON ANTI - AIDS CLUB MEMBERS

	YES	NO	DON T KNOW
54 Do you know of anything which the members of the Anti AIDS club have done to try to educate the school / community about HIV/AIDS ?	1	2	3
55 Do you think that learners in the school want to listen to the messages of the Anti AIDS club?	1	2	3

<p>56 In what ways has your sexual behavior changed <u>as a result of the message of the Anti AIDS club?</u> (Circle the options which apply to you)</p>	<p>7 There has been no change</p> <p>8 I have decided to use condoms</p> <p>9 I have decided to be faithful to one partner</p> <p>10 I have decided to have fewer sexual partners</p> <p>11 I have decided to be abstinent until I am ready for marriage</p> <p>12 Any other?</p> <p>Some of the coding here was sloppy responses were coded which already appeared in the given answers</p> <p>(1) I have decided to abstain is the same as 5 above</p> <p>(4) I have decided NOT to change my sexual behavior is the same as 1 above</p> <p><i>genuine new additions were</i></p> <p>8 (2) I have decided to practice AIDS prevention</p> <p>9 (3) I have decided to have a blood test</p>
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THANK YOU FOR YOUR CO-OPERATION PLACE YOUR QUESTIONNAIRE IN THE BOX NO ONE YOU KNOW WILL SEE YOUR ANSWERS